

AD-A195 761

**DEPARTMENT OF THE NAVY
JUSTIFICATION OF ESTIMATES
AMENDED FY 1988/1989 BIENNIAL
BUDGET**

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JUL 28 1988

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OPERATION & MAINTENANCE, NAVY

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Department of the Navy
Operation and Maintenance, Navy

BOOK ONE
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SUMMARY OF REQUIREMENTS BY PROGRAM PACKAGE (IN THOUSANDS)

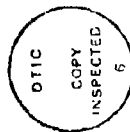
<u>BUDGET ACTIVITY 1:</u>	<u>FY 1987</u>	<u>FY 1988</u>	<u>FY 1989</u>	<u>EK-BA-PG</u>
<u>STRATEGIC FORCES</u>				
Trident Mission Support	120,225	90,500	93,517	1-1-06
Strategic Weapons Systems	748,992	736,284	790,854	1-1-15
FBM Ship Operations	118,956	104,870	106,677	1-1-21
FBM Ship Maintenance	656,596	259,300	318,923	1-1-25
Strategic Communications	67,098	62,725	61,165	1-1-33
Space Systems Operations	20,999	22,355	24,156	1-1-39
Command & Staff	24,472	19,823	20,957	1-1-45
Maintenance of Real Property	33,476	33,328	37,309	1-1-49
Base Operations	94,304	100,698	110,712	1-1-52
TOTAL BA-1	1,884,918	1,429,883	1,564,270	

<u>BUDGET ACTIVITY 2:</u>	<u>FY 1987</u>	<u>FY 1988</u>	<u>FY 1989</u>	<u>EK-BA-PG</u>
<u>GENERAL PURPOSE FORCES</u>				
TACAIR/ASW Operations	1,703,926	1,489,592	1,363,909	1-2-08
Fleet Air Support	396,762	303,159	302,651	1-2-12
Ship Operations	2,042,325	1,879,000	1,833,500	1-2-17
Ship Maintenance & Modernization	4,932,707	4,397,088	4,505,293	1-2-23
Combat Support Forces	136,541	97,989	94,300	1-2-34
Fleet Operations Support	173,285	188,784	383,745	1-2-40
Other Warfare Support	56,940	52,725	59,022	1-2-48
Fleet Air Training	473,296	459,349	436,670	1-2-54
Fleet Ship Training	47,979	42,045	43,075	1-2-60
Unified Commands	44,972	23,432	25,474	1-2-66
Fleet Commands & Staff	107,633	98,084	93,187	1-2-70
Cruise Missile	104,641	106,277	119,208	1-2-74
Maintenance of Real Property	544,138	416,905	378,154	1-2-79
Base Operations	1,283,124	1,272,001	1,354,990	1-2-82
Foreign Currency	142,700	0	0	1-2-90

Coast Guard Support	75,000	0	0	
AVDLR Credits	-329,029	0	0	
TOTAL BA-2	11,936,940	10,826,430	10,993,178	
BUDGET ACTIVITY 3:	FY 1987	FY 1988	FY 1989	BK-BA-PG
INTELLIGENCE & COMMUNICATIONS				
Security Program	386,191	384,718	405,858	1-3-7
Naval Communications	422,599	372,383	387,343	
Leased Communications	201,854	158,640	177,040	1-3-10
Worldwide Military Command & Control	21,898	19,913	22,624	1-3-17
Mgmt. Headquarters	6,971	7,003	6,700	1-3-20
Other Communications	191,876	186,827	180,579	1-3-23
Specialized Support	320,752	280,214	294,726	
Environmental Prediction Support	179,863	153,554	168,539	1-3-40
Naval Observatory	8,465	9,406	9,907	1-3-52
Maintenance of Real Property	29,364	24,577	24,449	1-3-58
Base Operations	103,060	92,677	91,831	1-3-62
TOTAL BA-3	1,129,5422	1,037,315	1,087,927	
BUDGET ACTIVITY 4:	FY 1987	FY 1988	FY 1989	BK-BA-PG
Sealift Prepositioning & Surge	597,308	547,117	546,629	1-4-04
TOTAL BA-4	597,308	547,117	546,629	

SUMMARY OF REQUIREMENTS BY ACTIVITY GROUP

	FY 1987			FY 1988			FY 1989		
	Personnel E/S		O&MN	Personnel E/S		O&MN	Personnel E/S		O&MN
	Mil	Civ	Funding	Mil	Civ	Funding	Mil	Civ	Funding
Budget Activity 1: Strategic Forces									
Trident Mission Support	17	155	120,225	20	150	90,500	20	149	93,517
Strategic Weapons System	712	2,041	748,992	1,003	2,469	736,284	1,181	2,753	790,854
FBM Ship Ship Operations	16,601	0	118,956	17,234	0	104,870	17,797	0	106,677
FBM Ship Maintenance	760	752	656,396	825	904	259,300	830	914	318,923
Strategic Communications	1,384	0	67,098	1,581	0	62,725	1,595	0	61,165
Space Systems Operations	145	284	20,999	158	319	22,355	155	319	24,156
Command & Staff	858	13	24,472	839	11	19,823	854	11	20,957
Maintenance of Real Property	0	34	33,476	0	34	33,328	0	34	37,309
Base Operations	609	755	94,304	596	858	100,698	1,502	830	110,712
Total BA-1	21,086	4,014	1,884,918	22,256	4,745	1,429,883	23,934	5,010	1,564,270



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Strategic Forces	
A-1	

Department of the Navy
Operation and Maintenance, Navy

Budget Activity: 1 Strategic Forces (Summary)

I. Description of Operations Financed.

The Navy's mission in the Strategic Forces program area is to provide an undersea strategic mission launch capability which will ensure that the United States maintains a credible and survivable deterrent to nuclear war. The Navy's strategic deterrent force in FY 1989 consists of thirty-seven nuclear submarines (SSBNs). There is no net increase over FY 1988 as two new TRIDENT I submarines deliver and two older POSEIDON submarines are decommissioned. The submarines provide the launch platforms for the undersea strategic missile system, four submarine tenders, one launch area support ship, related service craft, and four ships chartered from the Military Sealift Command (MSC).

Each alert submarine must be ready on patrol to respond to an operational order. Because of this mission they operate under conditions of complete self-sufficiency, including maintaining only one-way communications. Each SSBN is operated alternately by two crews who must know the status and condition of the submarine and the weapons system at all times.

Readiness of this weapon system must be continuously maintained, and the Joint Chiefs of Staff and the Fleet Commanders have prescribed a program of systematic tests which provide both strategic planners and the operating fleet with a high degree of confidence that predictable numbers of warheads will impact on target. The funding requested in this budget provides the support for the fleet ballistic missile forces to maintain the readiness and reliability required to meet the objectives and to support the testing necessary to determine whether the weapon systems are working as intended. An intensive, collaborative effort is undertaken between the fleet and the supporting complex ashore to demonstrate the ship's capability of sustaining high reliability standards. The result is a closed loop system which is the integral concept behind fleet ballistic missile system operational support.

In FY 1989, program growth results from the introduction of the TRIDENT II and D-5 System and the increase of one SSBN tender overhaul. All available audit savings have been incorporated into the following budget estimates.

Budget Activity: 1 (continued)

II. Financial Summary (Dollars in Thousands).

A. Activity Group Breakout:

	FY 1987		FY 1988		FY 1989		Change
	Budget Request	Approp	Current Estimate	Initial Estimate	Change	Amended Estimate	FY 88/89
Trident Mission Support	120,225	93,799	90,500	109,882	-16,365	93,517	3,017
Strategic Weapons Systems	748,992	743,634	736,284	862,430	-71,576	790,854	54,570
FBM Ship Operations	118,956	104,195	104,870	104,394	2,283	106,677	1,807
Ship Maint & Modern	656,396	370,706	259,300	469,956	-151,033	318,923	59,623
Strategic Communications	67,098	63,539	62,725	69,523	-8,358	61,165	-1,560
Space Systems	20,999	22,317	22,355	23,818	338	24,156	1,801
FBM Fleet Command & Staff	24,472	21,203	19,823	22,048	-1,091	20,957	1,134
Maintenance of Real Property	33,476	37,878	33,328	40,879	-3,570	37,309	3,981
Base Operations	94,304	109,013	100,698	118,328	-7,616	110,712	10,014
TOTAL	1,884,918	1,623,026	1,429,883	1,821,258	-256,988	1,564,270	134,387

B. Schedule of Increases and Decreases.

	Amount
1. FY 1988 President's Budget	1,623,026
2. Congressional Adjustments	
A. Inflation	-6,415
B. Travel	-5,315
C. Base Operations Support	-3,236
D. Workyear Pricing	-5,907
E. Civilian Personnel	-2,329
F. Headquarters Operations	-836
G. Depot Maintenance	-112,900
H. Leased Telecommunications	-600
I. ADP Operations	-62
J. Command, Control & Communications	-2,000
K. Savings	-12,379
L. Contractor Support Services	-13,650
M. Educational/Personnel Support	-1,500
	-193,399

Budget Activity: 1 (continued)

N. Manpower Savings	-219	
O. Expense Investment	-4,382	
P. Trident Support	-18,100	
Q. Training	-3,000	
3. FY 1988 Appropriated		1,429,627
4. Pricing Adjustments		6,954
A. FY 1988 Pay Raise	(1,936)	
1) Classified	1,545	
2) Wage Board	391	
B. Stock Fund	(1,598)	
1) Fuel	1,598	
C. Industrial Fund	(2,066)	
D. Other	(1,354)	
1) Other Purchases	1,354	
5. Other Increases		10,287
A. Programmatic Increases	(10,287)	
1) TACAMO Flying Hours	3,943	
2) Fleet Modernization Program Design Effort increase	6,444	
6. Other Decreases		-16,975
A. Programmatic Decreases	(-16,975)	
1) Change in Base Communications Requirements	-374	
2) Goldwater-Nichols Act Headquarters Reductions	-58	
3) Strategic Weapons Systems engineering support	-4,552	
4) Strategic Weapon System Overhauls	-4,900	

Budget Activity: 1 (continued)

5) Base Operations Utilities	-706	
6) Federal Employment Retirement	-6,395	
		1,429,883
7. FY 1988 Current Estimate		
8. Pricing Adjustments		31,201
A. Annualization of FY 1988 Pay Raise		
1) Classified	(2,476)	
2) Wage Board	1,568	
	908	
B. FY 1989 Direct Pay Raise		
1) Classified	(3,566)	
2) Wage Board	2,987	
	579	
C. Stock Fund		
1) Non-Fuel	(-12,702)	
	-12,702	
D. Industrial Fund Rates	(5,843)	
E. Other	(32,304)	
1) Other Purchases	32,304	
9. Program Increases		164,727
A. Trident Mission Support	7,118	
B. Strategic Weapons Systems	73,295	
C. FBM Ship Operations	3,475	
D. Ship Maintenance & Modernization	63,828	
E. Strategic Communications	3,802	
F. Space Systems	1,508	
G. FBM Fleet Command & Staff	960	
H. Maintenance of Real Property	2,845	
I. Base Operations	7,749	

Budget Activity: 1 (continued)

-61,541

10. Program Decreases

A. Trident Mission Support	-6,986
B. Strategic Weapons Systems	-41,316
C. FBM Ship Operations	-2,715
D. Ship Maintenance & Modernization	-4,264
E. Strategic Communications	-4,609
F. Space Systems	-372
G. FBM Fleet Command & Staff	-341
H. Maintenance of Real Property	-134
I. Base Operations	-943

1,564,270

11. FY 1989 Amended Budget Request

Department of the Navy
Operation & Maintenance, Navy
Exhibit OP-05

Activity Group: Trident Mission Support
Budget Activity: 1 Strategic Forces

I. Description of Operations Financed.

The Trident Mission Support Program is dedicated to establishing and maintaining TRIDENT at a high degree of operational readiness. TRIDENT is a three part weapon system comprised of longer range missiles and dedicated weapon support system, a nuclear powered submarine which is more survivable than earlier designs and a life cycle logistic support concept which has been designed to meet TRIDENT's reliability and readiness goals. Through the logistic support systems, which are dedicated to establishing and maintaining a high degree of operational readiness, TRIDENT is achieving an increase in at sea availability over the current POSEIDON force.

The preponderance of funding provides for engineering services and technical support for the TRIDENT submarines. Although a wide range of efforts are comprehended within this request, collectively they provide the means for keeping equipments operating. This includes testing to determine problems, developing corrections and maintaining up-to-date documentation. This type of life cycle logistic support is more disciplined for TRIDENT than for other programs and is the key to maintaining readiness goals. The concept is built on the premise of strict configuration management and pre-planned maintenance work which is accomplished during the ship's refits. The 95 day submarine operational cycle consists of 70 days at sea on patrol and 25 days off patrol. 18 days of the off patrol time are planned to accomplish a refit and incremental overhaul of the ship. After 10 years of operations, an extended availability is planned to accomplish alterations and repairs that are not feasible during the normal 18 day refits.

Support in this activity group provides the detailed pre-planning and engineering necessary to make maximum use of the 25 day off patrol periods. By knowing exactly what configuration and equipments are onboard, how many hours various equipment have been operating, what equipments are scheduled for maintenance removal and repair and other similar data, a specific maintenance plan for each refit can be developed. Thus, when the ship comes in for refit, the repair work has been scheduled, materials prepositioned and the right personnel and equipment are on hand.

Other aspects of the current life-cycle logistic support program include rigid training to ensure crew personnel are familiar with equipment operations, periodic tests to evaluate hardware and system performance, and maintenance of data base information.

TRIDENT Command and Control System Maintenance Activity (TRICCSMA), a NAVSEA field activity located at Naval Undersea Systems Center, Newport, R.I., provides for the life cycle operation and maintenance of OHIO

Activity Group: TRIDENT Mission Support (cont'd)

Class Command and Control System (CCS) equipments and computer software from a total systematic program approach. The subsystems composing the CCS include the following functional areas requiring system assessment:

Command	Integrated Radio Room
Sonar	Radio Antennas
Defensive Weapons	Radar
Monitoring	IFF (Identification Friend or Foe)
Data Processing	Interior Communication
Tactical Navigation	Electronic Support Measures
Periscope	Strategic System Interface

Life cycle maintenance of the CCS begins well in advance of ship construction/delivery in order to establish and maintain computer software and equipment and maintenance baselines through system level status accounting and configuration change management. The OHIO Class Submarine Maintenance Concept requires that such equipment subsystems be supported by subsystem In-Service Engineering Activities (ISEA) as well as equipment vendors even after ship transition to operational status. TRICCSMA is tasked to provide the requisite management and coordination of maintenance support to insure that the objectives of the TRIDENT Maintenance Concept are met. Primary objectives of TRICCSMA are to:

- Deploy and support the CCS operations of OHIO Class Submarines.
- Develop and maintain the CCS Maintenance baselines on the OHIO Class Submarines.
- Formulate an upgrade program for the CCS that will correct deficiencies and improve reliability of the system.

The Land Base Evaluation Facility (LBEF) supports TRIDENT I and TRIDENT II efforts. Funding provides installation design for equipment configuration, acquisition of installation materials (cables, trays, pipes), and test procedures for equipment relocation.

Activity Group: TRIDENT Mission Support (cont'd)

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout:

	FY 1988			FY 1989			Change FY 88/89
	FY 1987	Budget Request	Approp	Current Estimate	Initial Estimate	Amended Estimate	
TRIDENT Mission Support	88,283	86,615	69,294	66,182	84,660	70,217	4,035
TRIDENT Command and Control System Maintenance Activity	31,942	26,468	24,505	24,318	25,222	23,300	-1,018
Total-TRIDENT Mission Support	120,225	113,083	93,799	90,500	109,882	93,517	3,017

B. Reconciliation of Increases and Decreases.

	Amount
1. FY 1988 Current Estimate	\$90,500
2. Pricing Adjustments	2 847
A. Annualization of FY 1988 Direct Pay Raise	(28)
1) Classified	28
B. FY 1989 Direct Pay Raise	(84)
1) Classified	84
C. Industrial Fund Rates	(20)
D. Other Pricing Adjustments	(2,715)
1) Other Purchases	2,715
3. Program Increases	7,137
A. Other Program Growth in FY 1989	(7,137)

Activity Group: TRIDENT Mission Support (cont'd)

1) TRICCSMA-increases in related logistics, engineering and technical services for configuration management, certification of logistics packages due to the build-up of the TRIDENT facility in Kings Bay, GA, resolution of 189 additional problem reports and the development, certification and installation support of 26 additional TRIDENT Configuration Modifications and Temporary Engineering Changes (TEC S) (1,177), and an average grade salary adjustment (54). 1,231

2) TRIDENT Intermediate Maintenance - Planned increase in Non-TRIDENT Planned Equipment Replacement repairs; TRIDENT Planned Equipment Replacement (TRIPER) Inventory Actions; Class Command and Control System (CCS) Maintenance programs; Performance Monitoring; the CCS CLASS Improvement Program. Increases are due to additional ship monitoring months and ship systems monitored as two additional TRIDENT submarines are added to the fleet in FY 1989. 5,906

4. Program Decreases

A. Other Program Decreases in FY 1989 (-6,967)

1) TRICCSMA - Completion of the Land Based Evaluation Facility (LBEF) relocation project (WILCON Project P-042) (-2,969) and an adjustment for two fewer days in the pay year (-46). -3,015

2) TRIDENT Intermediate Maintenance - Reduced levels of Hull Mechanical and Electrical Engineering Services (HM&E) and reliability -3,923

Activity Group: TRIDENT Mission Support (cont'd)

due to fewer taskings, problem reports and HM&E changes screened (-483); reduced revisions to maintenance plans and configuration and manual change reports (-1,677); and fewer problem reports due to fewer engineering actions to be analyzed and processed (-1,763).

- 3) Decrease in support of Naval programs, administration of personnel programs and commercial activities at Ordnance and Weapon stations. These activities were formerly financed from the industrial fund.

\$93,517

5. FY 1989 Amended Estimate

III. Performance Criteria.

	FY 1987		FY 1988		FY 1989	
	Units	\$(000)	Units	\$(000)	Units	\$(000)
TRIDENT Mission Support Total Funding	88,283	66,182	70,217			
1) HM&E Eng Serv						
No. of Tasks	71	35	31			
HM&E Prob Rpts	60	37	33			
HM&E Changes Screened	123	66	59			
Work Years	140	70	62			
2) Planning Yard						
Trouble Failure Rpts	4,426	3,000	3,000			
Liaison Action Rqst	737	500	500			
Refit Completion Rpts	45	32	32			
Work Years	116	82	82			

Activity Group: TRIDENT Mission Support (cont'd)

3) Non-TRIDENT Planned Equipment Replacement Repair	7,617	7,211	7,896	
No. of Planned Rprs	561		484	597
No. of Planned Refurbs	63		79	66
Work Years	149		144	154
4) Alteration Program	3,507	2,079	2,003	
Alts (Depot Avail Period)				1
Alts (Refits)	6	3	61	52
Work Years	83	26		25
5) TRIDENT Planned Equipment Replacement (TRIPER) Logistics	2,946	2,026	2,902	
Inventory Actions	550	377		538
Work Years	54	36		52
6) Reliability Maintenance	6,423	4,835	3,158	
Revs to Maint. Plans	174	128		52
Config Change Rqsts	54	40		26
Config Audits	26	20		12
Manual Change Rqsts	500	369		234
Work Years	90	68		44
7) Noise Reduction	983	647	647	
# Investigations	3	2		2
Mid-Cycle Acoustical Trials (# of Hulls)	2	1		1
Work Years	10	6		6

Activity Group: TRIDENT Mission Support (cont'd)

8) Class Command and Control System (CCS) Maintenance Factors	40,965	28,974	29,673
A. Maintenance	(19,130)	(13,536)	(15,998)
Data Extraction Tapes	2,038	1,305	1,599
Data Packages	154	104	132
TRIDENT CCS Problem Reports	6,912	4,468	5,209
TRIDENT CCS Mods Instal	42	29	35
Temp Engineering Changes	154	104	132
Work Years	222	142	166
B. Acquisition	(21,835)	(15,438)	(13,675)
INSURV/GMI Def (# of Problem Rpts)	97	70	62
Required Engineering Actions	1,698	1,197	759
Temporary Engineering Changes Processed	29	18	16
Total TARS	537	367	207
COMTEVFOR Def	37	33	28
Work Years	245	164	146
9) Performance Monitoring	2,185	886	1,751
Total Ship Systems Monitored	456	182	346
End of Refit Reports Analyzed	30	13	24
Ship Monitoring Months	96	38	73
Work Years	30	12	21
10) Class Command and Control System (CCS) Improvement Systems	3,062	1,839	4,875
Work Years	8	5	13
	31	15	39
11) ILS Engineering Support (Workyears)	772	8	215
12) Hull Mechanical and Electrical Operational Support (Workyears)	453	6	3,708
13) Unidentified Acoustical Tonals (Workyears)	79	1	124

Activity Group: TRIDENT Mission Support (cont'd)

14) Hull Mechanical and Electrical Class Improvement (Workyears)	456	10	106	2	135	2
15) Industrial Plant Equipment	-	-	222	-	166	-
16) TRIDENT SSBN ILS (Workyears)	-	-	1,463	17	1,463	17
17) TRIDENT Training Facility Bangor Life Cycle Support	1,227		1,263		1,410	
<u>B. TRIDENT C&CSMA Total Funding</u>	<u>31,942</u>	<u>24,318</u>	<u>23,300</u>			
1) Direct Funded Salaries/Benefits (W/Y)	5,357	137	6,067	147	5,195	
2) Mission Support	3,204		2,671		2,957	
3) Logistics, Eng/Tech Services	17,309		12,551		14,107	
4) LBEP Relocation Support (MILCON Proj P-042)	6,072		2,969		0	
5) Problem Reports Requiring Engineering Action	1,903		1,465		1,654	
6) TRIDENT Configuration Modifications and Temporary Engineering Changes Installed	300		222		248	
7) CCS Hardware & CCS Documents Under Active Configuration Management (000)	1,399		1,954		2,015	
8) Industrial Equipment	0		60		45	

Activity Group: TRIDENT Mission Support (cont'd)

IV. Personnel Summary.

<u>End Strength</u>	<u>FY 1987</u>	<u>FY 1988</u>	<u>FY 1989</u>
A. <u>Military</u>			
Officer	17	20	20
Enlisted	7	7	7
	10	13	13
B. <u>Civilian</u>			
USDR	155	150	149
	155	150	149

Department of the Navy
Operation & Maintenance, Navy
Exhibit OP-05

Activity Group: Strategic Weapons Systems
Budget Activity: 1 - Strategic Forces

I. Description of Operations Financed.

The Strategic Systems Project Office (SSPO) is responsible for the operational readiness and reliability of the strategic weapons systems aboard the fleet ballistic missile submarines (SSBNs) that constitute the Navy's strategic deterrent forces. Forces currently supported are the POSEIDON and C-4 Backfit SSBNs deployed in the Atlantic and the TRIDENT I SSBNs being deployed in the Pacific as they complete construction. SSPO is also responsible for all planning and other efforts required for support of the TRIDENT II weapon system currently being developed.

Strategic Weapons Systems funding provides for the following categories of requirements:

Strategic Weapons Systems Support. A strategic weapons system consists of the launcher, fire control, navigation, test instrumentation, missile, missile checkout, and guidance subsystems. Funding provides support for all subsystem equipments aboard POSEIDON, C-4 Backfit and TRIDENT SSBNs and at shore facilities. Efforts funded include: maintenance for subsystem equipments aboard SSBNs; equipment renewal and updating during overhauls; repair of failed components; logistics control procedures; operational flight testing; support of crew training; technical services required to test, analyze and maintain reliability of the weapons systems; missile maintenance operations at missile processing facilities; targeting support; and the operating expenses of field activities and headquarters.

Surface Support Ships. Efforts funded include engineering services, repair efforts and weapons system overhaul requirements necessary for surface vessels to support the POSEIDON, C-4 Backfit and TRIDENT programs. Surface ships supporting these programs include the USNS REDSTONE (TAGM-20), the USNS RANGE SENTINEL (TAGM-22), and the USNS POINT LOMA (ACDS-2), utilized to gather test data during operational flight tests, and the four tenders which serve as second echelon repair facilities and supply ships for POSEIDON and C-4 Backfit submarines.

TRIDENT System Support. Provides for TRIDENT systems support costs not uniquely identifiable to the submarine or the strategic weapons system. Specific efforts include: facility planning, industrial engineering, outfitting, equipment installation and checkout, and other efforts required for development and activation of the Naval Submarine Base, Kings Bay; operation and maintenance of the TRIDENT Logistics Data System; TRIDENT training support, including support of training hardware, software and curricula at the existing TRIDENT Training Facility, Bangor and system design and hardware/software acquisition and planning for the TRIDENT Training Facility to be located at Kings Bay (IOC FY 1989); development and implementation

Activity Group: Strategic Weapons Systems (cont'd)

of an integrated TRIDENT Logistics support assessment system; TRIDENT program management support; and the operating expenses for the TRIDENT Refit Facility and TRIDENT Training Facility at Kings Bay.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout:

	FY 1987		FY 1988		FY 1989		Change FY 88/89
	FY 1987	Budget Request	Approp	Current Estimate	Initial Estimate	Amended Estimate	
TRIDENT Weapons Systems	102,302	120,885	103,720	101,475	127,932	-15,914	10,543
Strategic Weapons Sys Sup	637,724	647,911	629,999	624,894	722,332	-54,353	43,085
FBM Support Ships	8,966	11,816	9,915	9,915	12,166	-1,309	942
<u>TOTAL-Activity Group</u>	<u>748,992</u>	<u>780,612</u>	<u>743,634</u>	<u>736,284</u>	<u>862,430</u>	<u>-71,576</u>	<u>54,570</u>

B. Reconciliation of Increases and Decreases:

1. FY 1988 Current Estimate						\$736,284
2. Pricing Adjustments						25,350
A. Annualization of FY 1988 Direct Pay Raises				(2,006)		
1) Classified				1,505		
2) Wage Board				501		
B. FY 1989 Direct Pay Raise				(1,155)		
1) Classified				1,124		
2) Wage Board				31		
C. Stock Fund				(-295)		
1) Non-Fuel				-295		
D. Industrial Fund Rates				(304)		

Activity Group: Strategic Weapons Systems (cont'd)

E. Other Pricing Adjustments	(22,180)	
1) Health Benefits	365	
2) Annualization of Federal Employee Retirement.	528	
3) Other Purchases	21,287	
		-2,400
3. Functional Program Transfers		
A. Transfers In	(390)	
1) Intra-Appropriation		
a) Transfer of crane operators and riggers from SSP0, Base Operations (BA-1) to the TRIDENT Refit Facility	390	
B. Transfers Out	(-2,790)	
1) Intra-Appropriation	-2,790	
a) Transfer of TRIDENT II Crew Training to LANTFLT, Fleet Command & Staff (BA-1).	-182	
b) Submarine Towed Arrays and Tactical Combat Systems to NAVSEASYSKOM, Ship Maint & Modern (BA-1).	-2608	
		72,921
4. Program Increases		
A. Other Program Growth in FY 1989	(72,921)	
1) Increase in salaries, benefits, and travel costs to support additional personnel at the TRIDENT Refit Facility (TRF), TRIDENT Training Facility (TTF), and Strategic Weapons Facility at Kings Bay, GA. Civilian end strength increases by 284 at these facilities in support of the TRIDENT II (D-5) Strategic Weapons System.	10,514	
2) Increased class planning for the D-5 BACKFIT Strategic Weapon System on board the existing TRIDENT submarines.	12,452	
3) Increase necessary to establish and begin	32,436	

Activity Group: Strategic Weapons Systems (cont'd)

operation of a TRIDENT II (D-5) logistical support system and commence performance evaluation, surveillance and reliability maintenance on the missile components and subsystems previously accepted under the development program.

4) Increase in the contractor field engineering, contractor support and other operating costs for missile processing at the Strategic Weapons Facility, Atlantic, for the TRIDENT II (D-5) missile. 9,624

5) Supports increases in the training support necessary for the TRIDENT II (D-5) Strategic Weapon System. Support includes training materials acquisition, field engineering and technical support of weapons and navigation trainers. 7,895

5. Program Decreases

A. One-Time FY 1988 Costs (-1,181)

1) Reduction in costs due to the completion in FY 1988 of the TAGM Portable Ship Instrumentation Package Van installation. -1,181

B. Other Program Decreases in FY 1989 (-40,120)

1) Decrease in transportation costs due to a reduction in the relocation requirements for civilian personnel at the Kings Bay, GA, facilities; and reduction in personnel compensation due to 2 less paid days in FY 1989. -811

2) Reduction in overhaul support due to no new new SSBN overhaul starts in FY 1988 or FY 1989. -11,172

Activity Group: Strategic Weapons Systems (cont'd)

- 3) Reduction in costs due to the completion in FY 1988 of the Material Readiness Upkeep Period (MRUP) for the USNS MARSHFIELD (TAK). -10,857
 - 4) Reduced operational and engineering support for the C3/C4 Strategic Weapons Systems due to the transition to the D-5 Weapons System. -2,349
 - 5) Reduction in the outfitting, equipment installation and acceptance testing at the TRIDENT Refit Facility, Kings Bay, GA. -246
 - 6) Projected savings resulting from the Navy Efficiency Review Program. -246
- \$790,854

III. Performance Criteria.

A. <u>Operational Support (Deployed Shipmonths)</u>		<u>FY 1987</u>	<u>FY 1988</u>	<u>FY 1989</u>
SSBN (POSEIDON)	137	137	137	146
SSBN (C-4 BACKFIT)	83	83	113	144
SSBN (TRIDENT)	89	89	96	96
TENDER-(Excludes AS-31 support of SSBNs)	40	40	38	40
B. <u>Missile Processing</u>				
POSEIDON (C-3) (POMFLANT)	94	94	97	83
C-4 BACKFIT (C-4) (POMFLANT)	112	112	38	42
TRIDENT (C-4) (SWFPAC)	78	78	49	42
C. <u>Weapon Systems Offline Support (Shipmonths)</u>				
POSEIDON Overhauls	55	55	48	22
C-4 BACKFIT Overhauls	61	61	31	0
Tender Overhauls	8	8	0	1
1-1-19				

Activity Group: Strategic Weapons Systems (cont'd)

D. Overhaul Starts	3	0	0
E. TRIDENT Refits	30	32	32

IV. Personnel Summary.

	<u>FY 1987</u>	<u>FY 1988</u>	<u>FY 1989</u>
<u>End Strength</u>			
A. <u>Military</u>			
Officer	712	1,003	1,181
Enlisted	198	244	271
	514	759	910
B. <u>Civilian</u>			
	2,041	2,469	2,753
USDH	2,041	2,469	2,753

Department of the Navy
Operation & Maintenance, Navy
Exhibit OP-05

Activity Group: FBM Ship Operations
Budget Activity: I Strategic Forces

I. Description of Operations Financed.

This program provides a fleet of 37 Strategic submarines in FY 1988 and FY 1989 as the launch platform for the undersea strategic missile system. The submarines, together with four submarine tenders, related service craft, and four chartered ships are operationally supported in this program. Operational expenses include:

Fuel - includes ship propulsion fuel to operate the main plant/engines of the conventionally powered ships, auxiliary equipment, and small boats, and small quantities of fossil fuel used in auxiliary diesel engines of nuclear submarines. The major portion of fuel is used by the tenders while in port to support ships' power and heat needs, as well as hotel services to submarines that are moored alongside during periods of intermediate maintenance.

Utilities - includes the cost of steam, electricity, water, sewage treatment and other utilities (excluding telephone and garbage removal) incurred by FBM submarines and support ships while in port.

Supplies and Equipment (S&E) - includes expenses of repair parts and other operating target (OPTAR):

Repair parts - include all repair related consumables required to accomplish organizational level equipment maintenance. Organizational level maintenance is that corrective and preventive maintenance accomplished by the ship's crew.

Other operating target (OPTAR) - includes administrative and housekeeping items; items having a limited life such as lubricants, boiler compound and bilge cleaner; devices such as power tools, office machines, duplicators; General Purpose Test Equipment (GPETE); Automated Data Processing (ADP) requirements; the cost of tugs, pilotage, and other related services provided by commercial or other non-naval forces; and the cost of material purchased for medical and dental purposes.

Activity Group: FMB Ship Operations (Cont'd)

Leaseback (Charter) - includes two FBM cargo ships (T-AK) and a Range Instrument ship (T-AGM), and a Auxiliary Deep Submergence Support Ship (T-AGDS) leased from the Military Sealift Command (MSC). The T-AKs provide regularly scheduled service to the FBM replenishment sites in Holy Loch, Scotland, Charleston, South Carolina and Kings Bay, Georgia. The T-AGM provides range safety (destruction) tracking, surveillance, communication and other services, such as monitoring the demonstration and shutdown operations of new SSBNs, as well as monitoring firings following SSBN overhaul. Costs include maritime crew salaries, fuel, ship repairs, supplies and equipment and administrative expenses.

II. Financial Summary (Dollars in Thousands) -

A. Sub-Activity Group Breakout.

	FY 1987	FY 1988		FY 1989			Change FY 88/89	
		Budget Request	Approp.	Current Estimate	Initial Estimate	Change Estimate		
Fuel	5,644	4,621	4,621	4,626	3,764	367	4,131	-495
Utilities	6,224	6,636	6,581	6,581	8,244	128	8,372	1,791
Repair Parts	37,022	36,852	36,636	35,313	35,718	-3,751	31,967	-3,346
Other OPTAR	33,567	30,185	29,997	31,563	30,252	-384	29,868	-1,695
MSC Charter	36,399	26,381	26,360	26,787	26,416	5,923	32,339	5,552
Total Act. Group	118,956	104,675	104,195	104,870	104,394	2,283	106,677	1,807

B. Reconciliation of Increases and Decreases -

Amount

1. FY 1988 Current Estimate	104,870
2. Pricing Adjustments	1,016
A. Stock Fund	
(1) Non-Fuel	(-5,057)
B. Industrial Fund Rates	-5,057
C. Other Pricing Adjustments	(5,593)
	(480)

Activity Group: FMB Ship Operations (Cont'd)

3. Program Increases 3,491

A. Other Program Growth in FY 1989 (3,491)

- 1) Phased delivery of two Trident SSBNs (+1.0 ship years). 1,741
- 2) Increased fuel, utilities, and material support for Trident submarines. 1,750

4. Program Decreases -2,700

A. One-Time FY 1988 Costs (-54)

- 1) Reduction of one extra (leap-year) MSC charter day. -54

B. Other Program Decreases in FY 1989 (-2,646)

- 1) Reduction to tender fuel consumption. -497
- 2) SSBN inactivations (- 1.0 ship years). -1,011
- 3) Reduced procurements of phased material replacement items (e.g. mooring lines, lifejackets, firehoses, etc.). -569
- 4) Reduction of component and repair parts stock replenishments to realign inventories with requirements. -569

5. FY 1989 Amended Budget Request 106,677

III. Performance Criteria.

	FY 1987	FY 1988	FY 1989
Ship Inventory			
Conventional	41	41	41
Nuclear	4	6	4
	37	37	37
Ship Years Supported			
Conventional	41.2	41	40.8
Nuclear	4.0	4	4.0
	37.2	37	36.8
Underway Steaming Hours			
Conventional	172,625	177,035	182,375
Nuclear	3,604	2,075	1,761
	169,021	174,960	180,614

Activity Group: FHB Ship Operations (Cont'd)

Barrels of Fossil Fuel	178,382	168,352	150,157
Per Diem Days	1,460	1,464	1,460
MSC Charter Inventory	4	4	4
MSC Charter Activation	1	0	0
MSC Charter Inactivation	0	0	0

IV. Personnel Summary.

End Strength	FY 1987	FY 1988	FY 1989
A. Military E/S	16,601	17,234	17,797
Officer	1,248	1,246	1,329
Enlisted	15,353	15,988	16,468

Department of the Navy
Operation and Maintenance, Navy
Exhibit OP-05

Activity Group: FBM Ship Maintenance
Budget Activity: I Strategic Forces

I. Description of Operations Financed

This program funds depot and intermediate level maintenance and modernization, initial outfitting and associated technical support for the strategic forces as follows:

Regular Overhaul of the ship is that maintenance performed by the shipyards on material requiring major overhaul, or complete rebuild of parts, assemblies, subassemblies and end items and correction of all discrepancies found during pre-overhaul tests and inspections or developed from maintenance history analysis. The repairs restore the ship, including all operating subsystems which affect safety or current combat capability, to established performance standards. Depot level repairs for the family of detection and tracking (unique) SONARS installed on SSBNs includes overhaul, refurbishment and certification of SONARS and interface equipment.

Restricted and Technical Availabilities (RA/TA). A Restricted Availability (RAV) is for the accomplishment of specific items of work by a repair activity, normally with the ship present, during which period the ship is rendered incapable of fully performing its assigned mission and tasks due to the nature of the repair work. A Technical Availability (TAV) is for the accomplishment of specific items of work by a repair activity, normally with the ship not present, during which period the ship's ability to fully perform its assigned mission and tasks is not affected by the nature of the repair work. RA/TA repairs include voyage repairs, selected restricted availabilities, phased maintenance availabilities, repairs during post shakedown availabilities for new units and various other miscellaneous type repairs.

Fleet Modernization Program. The strategic forces portion of the Fleet Modernization Program provides for the modernization of the POSEIDON and TRIDENT submarines, FBM submarine tenders and strategic support ships. It funds the preliminary design, preparation of blueprints and associated documents, installation of equipment, and updating of ship records. Installation is accomplished during overhaul, at a forward site, or in conjunction with a restricted or technical availability.

Specifically, the FY 1989 program will fund improvements in SSBN primary mission areas, including noise reduction, silencing alterations and sonar improvements which are designed to ensure the defensive acoustic advantage of SSBNs. The program of installing small but high priority mission alterations during SSBN refit periods continues. This program uses industrial teams to install alterations during the extended SSBN operational cycle, which can be as long as 12 years.

Outfitting provides non-aviation initial and follow-on outfitting support for active ships and other

Activity Group: FBM Ship Maintenance (cont'd)

selected or unique outfitting programs as required. Support is provided for outfitting and allowance changes resulting from installation of new equipment, modification of equipment, special equipage programs, revision of allowance parts lists and allowance equipage lists, modification of allowance computation rules, and other approved allowance changes

Intermediate Level Maintenance is that maintenance which is normally performed by Navy personnel on tenders and repair ships, or at Fleet support bases. It normally consists of calibration, repair or replacement of damaged or unserviceable parts, components or assemblies; the emergency manufacture of unavailable parts; and providing technical assistance to using organizations. IMAs are assigned to repair and test weight handling equipment, repair periscopes, electronic equipment and electric motors, overhaul diesel engines and provide such services as printing, photography, optical repairs, engraving, canvas work, strainer shield manufacture, and certain preventive maintenance actions. The principal components of the Fleet Ballistic Missile Force IMA establishment are the submarine tenders and the TRIDENT shore based facility at Bangor, Washington.

Technical and Engineering Programs provide necessary support for submarines and SONARS subjected to longer operational intervals by the Submarine Engineered Operating Cycle (SEOC) program, including acoustic trials.

Inactivations provides funds to defuel, dismantle and dispose of ballistic missile submarines for various reasons including compliance with prevailing arms limitation agreements.

II. Financial Summary (Dollars in Thousands)

A. Sub-Activity Group Breakout

	FY 1987	Budget Request	FY 1988		FY 1989		Amended		Change FY 88/89
			Approp	Current Estimate	Initial Estimate	Change	Estimate	Estimate	
Ship Overhauls	334,257	110,549	0	62	164,808	-156,790	8,018		+7,956
Restr./Tech. Avail	78,824	80,883	74,032	73,970	108,212	-690	107,522		+33,552
Fleet Modernization	78,263	32,633	12,664	23,574	38,188	-6,240	31,948		+8,374
Outfitting	23,139	18,789	17,887	17,887	25,048	-2,953	22,095		+4,208
Intermediate Maint.	88,693	88,194	87,936	87,263	92,743	-3,821	88,922		+1,659
Unique Sonars	30,181	21,548	19,982	19,982	23,299	1,002	24,301		+4,319
SSBN Monitoring	17,239	15,731	14,303	14,277	15,621	-1,433	14,188		-89
Maint. Engrng	0	2,379	2,285	2,285	2,037	-108	1,929		-356
Inactivations	5,800	0	20,000	20,000	0	20,000	20,000		0
Total Activity Group	*656,396	370,706	249,089	259,300	469,956	-151,033	318,923		+59,623

Activity Group: FBH Ship Maintenance (cont'd)

* Excludes \$52.8 million, unobligated on 30 September 1987 but required by government estimate, for completion of private repair contracts executed under Technical Operating Budget (TOB) procedures and for changes in scope of ship overhaul, maintenance, and repair for work inducted in FY 1987 per authority of 10 U.S.C. 114.

B. Reconciliation of Increases and Decreases

1. FY 1988 Current Estimate		259,300
2. Pricing Adjustments		-2,580
A. Annualization of Direct Pay Raises	(639)	
1) Classified	230	
2) Wage Board	409	
B. Direct Pay Raises	(279)	
1) Classified	109	
2) Wage Board	170	
C. Stock Fund	(-5,429)	
1) Non-Fuel	-5,429	
D. Industrial Fund Rates	(-105)	
E. Other Pricing	(2,036)	
3. Functional Program Transfer		2,608
A. Transfers In	(2,608)	
1) Intra-Appropriation		
a) Transfer of Towed Array support budget responsibility from the Strategic Weapons Systems Group	2,608	
4. Program Increases		63,844
A. Other Program Increases in FY 1989	(63,844)	
1) Docking SRA of AS-34.	7,668	
2) Fleet Modernization Program increases for 7 more AN/BQR-15 and for 3 more AN/YKR-62(V)1 installations during Forward Site Modernizations.	12,780	
3) Increase of two battery renewals.	1,041	
4) Additional Service Craft Overhaul primarily for Dry Docks.	22,490	
5) Post Shakedown Availability for the first TRIDENT for the Atlantic	500	
		1-1-27

Activity Group: FBM Ship Maintenance (cont'd)

Fleet.		
6) Advance funding for SSBN 726 overhaul.	8,018	
7) Increase in SSBN unique sonars funding to support operational units.	1,615	
8) Increase for additional allowances and new start equipment outittings	9,732	
		-4,249
5. Program Decreases		
A. Other Program Decreases in FY 1989	(-4,249)	
1) Reduction of 1 acoustic trial	-534	
2) Decrease for completion of out-fitting requirements for items/efforts completed.	-3,715	
6. FY 1989 Amended Budget Request		318,923

III. Performance Criteria

A. Ship Overhauls

The following depicts the regular overhaul program for fiscal years 1988 and 1989. No POSEIDON overhauls are scheduled for either FY 1988 or FY 1989.

Ship Type SSBNs	FY 1987		FY 1988		FY 1989	
	Ships	\$M	Ships	\$M	Ships	\$M
Tenders	3	362.5		0.0		0.0
Advance Funding		3.6		0.1		4.0
AERP/PERA*		2.9				4.0
Maintenance Carry Forward		-38.4				
Total Program		334.3		0.1		8.0

*Advanced Equipment Repair Program/Planning, Engineering Repair and Alteration represents preoverhaul effort/repairs accomplished outside the shipyard facilities and directly funded by the customer.

B. Restricted and Technical Availability. The resources required for voyage repairs are based on historical experience for each ship type and number of

Activity Group: FBM Ship Maintenance (cont'd)

ships. Resources for planned availabilities are based on the schedule in each category. A summary of requirements follows:

Type of Repair	FY 1987		FY 1988		FY 1989	
	Ships	\$M	Ships	\$M	Ships	\$M
Voyage (ship yrs)	59.4	8.7	60.0	10.1	59.8	11.6
Battery Renewals	1	0.4	5	3.8	7	4.9
SRAs	7	46.5	3	35.9	4	45.8
Habitability		0.2		1.9		1.9
PSAs	0	0.0	0	0.0	1	0.5
Service Craft Ovhl	4	16.2	0	1.2	4	23.8
Misc. Avail.		14.8		21.1		19.0
Maintenance Carry Forward		-8.0				
Total		78.8		74.0		107.5

C. Fleet Modernization Program

FY 1987	IMPOSED REQMTS.	MISSION	C3	SAFE		PROGRAM TOTAL
				HM&E & NAV	HAB & PERS SUPPORT	
						\$
SUBMARINES	0.0	11.5	8.0	20.7	5.2	0.0
						7.1
						52.5
FBM SUPPORT SHIPS	0.0	0.7	0.0	0.0	0.0	0.6
						1.3
FLOATING DRYDOCKS	0.0	0.0	0.0	0.0	0.0	0.0
						0.0
SEPARATE FUNDING	5.4	0.0	1.0	16.8	0.0	8.4
						31.6
NET ADVANCE PLANNING						-0.7
MAINT. CARRY FORWARD						-6.4
TOTAL FOR BA - 1	5.4	12.2	9.0	37.5	5.2	0.0
						16.1
						78.3

Activity Group: FBM Ship Maintenance (cont'd)

	IMPOSED REQMTS.	MISSION	C3	HM&E	SAFE & NAV	HAB PROGRAM & PERS SUPPORT	TOTAL \$
FY 1988							
SUBMARINES	0.0	0.0	0.0	3.6	0.0	0.0	3.1 6.7
FBM SUPPORT SHIPS	0.0	0.6	0.0	0.0	0.0	0.0	0.7 1.3
FLOATING DRYDOCKS	0.0	0.0	0.0	0.0	0.0	0.0	0.0 0.0
SEPARATE FUNDING	0.0	14.8	0.0	0.7	0.0	0.0	0.0 15.5
NET ADVANCE PLANNING							0.0
TOTAL FOR BA - 1	0.0	15.4	0.0	4.3	0.0	0.0	3.8 23.5

	IMPOSED REQMTS.	MISSION	C3	HM&E	SAFE & NAV	HAB PROGRAM & PERS SUPPORT	TOTAL \$
FY 1989							
SUBMARINES	0.0	4.0	2.1	8.7	0.0	0.0	9.3 24.1
FBM SUPPORT SHIPS	0.0	0.2	0.0	0.0	0.0	0.0	0.9 1.1
FLOATING DRYDOCKS	0.0	0.0	0.0	0.0	0.0	0.0	0.0 0.0
SEPARATE FUNDING	0.0	6.7	0.0	0.0	0.0	0.0	0.0 6.7
NET ADVANCE PLANNING							0.0
TOTAL FOR BA - 1	0.0	10.9	2.1	8.7	0.0	0.0	10.2 31.9

D. Outfitting (\$000):

	FY 1987	FY 1988	FY 1989
Equipment Outfitting	9,017	5,111	11,865
COSAL Update	6,658	7,274	3,472
Equipage, Special Programs	2,533	1,355	1,488
Between Overhaul Changes	4,931	4,147	5,270
Total	23,139	17,887	22,095

Activity Group: FBM Ship Maintenance (cont'd)

E. Intermediate Maintenance. Funding provides for repair parts and materials for support of strategic submarines alongside the submarine tenders or at the refit facility, maintenance of the FBM submarine tenders and support for various related service craft, as follows:

	<u>FY 1987</u>	<u>FY 1988</u>	<u>FY 1989</u>
Productive Manyears Available	<u>1,543.4</u>	<u>1,583.8</u>	<u>1,634.2</u>
Workload Manyears*	1,977.4	2,016.8	2,038.2
Material Cost (\$000)	44,855	43,332	40,800
Contractor Industrial Support (\$000)	826	1000	820
TRIPER Material (\$000)	5,715	5,078	7,339
TRIREFITFAC Operations (\$000)	37,300	37,853	39,963
Total (\$000)	88,693	87,263	88,922

*Includes TRIPER workload of:

91.5 110.0 110.4

F. Inactivations

Number of Submarines inactivating

FY 1987 FY 1988 FY 1989

0 1 1

G. Technical and Engineering Support

(1) SSBN Unique and Related Sonars:

	<u>FY 1987</u>	<u>FY 1988</u>	<u>FY 1989</u>
Engineering Services (operational yrs)	137.0	151.8	180.0
Class Planning/Overhaul Management (Submarine classes)	3	2	1
Sonar Installations	3	8	9
Sonar Refurbishments	20	12	12

(2) SSBN Ship System Maintenance Monitoring and Support Program

	<u>FY 1987</u>	<u>FY 1988</u>	<u>FY 1989</u>
Test, Inspection & Maint. Doc. ¹	246	274	301
Ship Subsystems Perf. Data Suppt. ¹	246	274	301
Material Condition Assessment	246	274	301
Extended Refit Period Work Package (Review, analysis, and coordination) ²	5	5	5
	1-1-31		

Activity Group: FBM Ship Maintenance (cont'd)

SEOC Maint. Planning and Log. Support² 74 59 59

¹Ship operating months

²Planning workyears

IV. Personnel Summary

A. Military E/S
Officer
Enlisted

FY 1987	FY 1988	FY 1989
<u>760</u>	<u>825</u>	<u>830</u>
<u>44</u>	<u>37</u>	<u>35</u>
716	788	795

B. Civilian E/S
USDH

FY 1987	FY 1988	FY 1989
<u>752</u>	<u>904</u>	<u>914</u>
752	904	914

Department of the Navy
Operation and Maintenance, Navy
Exhibit OP-05

Activity Group: Strategic Communications
Budget Activity: I Strategic Forces

I. Description of Operations Financed

Fleet Ballistic Missile (FBM) Control System Communications - This program provides support for operational and newly-introduced communications systems for the FBM forces. The program encompasses High Frequency (HF)/Very Low Frequency (VLF)/Low Frequency (LF) broadcast subsystems developed to provide improved reliability and the certainty of reception of messages from the National Command Authority (NCA) to deployed FBM submarines; secure ship-to-ship communications, a method of communicating the loss or disability of a submarine to shore locations; and a continuing evaluation program that ensures the effectiveness and readiness of the various systems.

The FBM Ship/Shore Communications program provides funds for engineering technical services and maintenance of deployed equipments and systems for ship-board and shore receiving sites. These services are provided from Naval and commercial industrial sources to support deployed and deploying systems onboard ship and shore stations worldwide. Funding is included for repair of specifically designated communications equipment. Engineering technical services cover such tasks as: planning; monitoring production; conducting site surveys; reviewing operational tests; evaluating hardware modifications; working out detailed operational procedures for the communications systems; conducting a program to evaluate operational readiness of systems and equipments; preparing and updating operational mode programs; configuration management; station operation and equipment maintenance; calibration; and systems effectiveness engineering. Requirements are determined by the number of systems and equipments installed and scheduled for delivery from production. Shore transmitting and receiving sites are operational 24 hours a day.

Airborne Communication maintains a continuous airborne communications coverage for Fleet Command and Control as an integral part of national defense strategy in support of worldwide retaliatory forces. Operations financed in this program include aircraft operating costs and aviation TAD. Current activity within this program provides synchronized low frequency spectrum communication coverage without interruption to deployed strategic forces. Maintenance and coverage requires airborne on-station relief with aircraft flying rotational patterns that utilize foreign and domestic air fields. To preclude interrupting coverage, a back-up aircraft and crew is positioned in a ready status. TAD funds are required to support travel requirements associated with operations, training and administrative travel.

In FY 1989 the two squadrons which provide the continuous airborne coverage required by the National Command Authority will begin transitioning for the EC-130 aircraft to the E-6A aircraft. Transition is

Activity Group: Strategic Communications (cont'd)

scheduled to be completed in FY 1991.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout:

	FY 1987		FY 1988		FY 1989		Change FY 88/89
	FY 1987	Budget Request	Approp	Current Estimate	Initial Estimate	Amended Estimate	
FBM Control Sys Comm	37,081	39,659	37,359	35,276	41,844	32,778	-2,498
TACAMO A/C Flight Ops	12,236	8,666	8,643	10,476	11,555	13,624	3,148
TACAMO A/C Operations Maint	14,598	12,300	12,284	14,394	13,124	12,053	-2,341
TACAMO A/C Air TAD	3,183	2,904	2,579	2,579	3,000	2,710	131
<u>TOTAL-Activity Group</u>	67,098	63,529	60,865	62,725	69,523	61,165	-1,560

B. Reconciliation of Increases and Decreases.

1. FY 1988 Current Estimate		Amount
		\$62,725
2. Pricing Adjustments		-784
A. Annualization of FY 1988 Pay Raise	(35)	
1) Classified	32	
2) Wage Board	4	
B. FY 1989 Direct Pay Raise	(86)	
1) Classified	81	
2) Wage Board	5	
C. Stock Fund	(-1,718)	
1) Non-Fuel	-1,718	
D. Industrial Fund Rates	251	
E. Other Pricing Adjustments	761	

Activity Group: Strategic Communications (cont'd)

3. Program Increases		3,818	
A. Other Program Growth in FY 1989	(3,818)		
1) Upgrade of submarine message processing under the Integrated Submarine Automated Broadcast Processing System/Improved Emergency Message Automated Transmission System to insure broadcast system interoperability with the Submarine Satellite Information Exchange System. This upgrade is to sites in Alaska and Iceland.	1,136		1,136
2) Site preparation for upgrade of Mayflower receiver systems.	18		
3) Increase in TACAMO travel requirements as the EC-130 squadrons transitions to the E-6A aircraft	122		
4) Increased flying hours for the addition of two E-6A aircraft as the EC-130 transitions to the E6-A.	2,542		
4. Program Decreases		-4,594	
A. Other Program Decreases in FY 1989	(-4,594)		
1) Decrease reflects termination of Space and Naval Warfare Systems Command support for the Take Charge and Move Out (TACAMO) program in FY 1989.	-1,200		
2) Reduction in systems engineering and systems integration configuration management support for submarine antennas due to efficiencies in the test and evaluation efforts.	-650		

Activity Group: Strategic Communications (cont'd)

-2,651

3) Decrease in logistics and support activities reflects continuation of previous efforts to eliminate inefficiency and duplication in logistics and engineering programs through improved management practices.

.93

4) Decrease in flying hour costs due to the replacement of the EC-130G with the EC-130Q.

\$61,165

5. FY 1989 Amended Estimate

III. Performance Criteria.

A. Airborne Communications:

FY 1987				FY 1988				FY 1989			
Average	Flying	Cost	Cost per Hour	Average	Flying	Cost	Cost per Hour	Average	Flying	Cost	Cost per Hour
Operational Aircraft	Hours	(\$000)		Operational Aircraft	Hours	(\$000)		Operational Aircraft	Hours	(\$000)	
16	23,120	26,832		17	23,527	24,870		17	24,027	25,713	
Hours per A/C	Cost per Hour			Hours per A/C	Cost per Hour			Hours per A/C	Cost per Hour		
1,445	1,161			1,384	1,058			1,413	1,071		

TAD Per Diem Days

FY 1988
79,685

FY 1987
94,671

FY 1989
83,710

B. Ship/Shore Communications

VERDIN/Enhanced VERDIN (AN/VRR-7, AN/VRR-7A)

Reactive Systems Maintained

MERLIN (AN/BST-1) Systems Maintained

FY 1988
307

FY 1987
307

FY 1989
307

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Activity Group: Strategic Communications (cont'd)

Fixed VLF Sites Maintained	7	7	7
VLF Sites Maintained	1	1	1
LF Transmitters Systems Maintained	21	21	21
Continuing Evaluation Program (CEP) Equipment Systems Maintained	18	18	18
SKP (Submarine Keyboard Printers) Equipment Maintained	111	111	111
BCA (Buoyant Cable Antenna) Equipment Equipment Maintained	34	34	34
CBFS (Cesium Beam Frequency Standard) Equipment Maintained	480	480	480
<u>MAYFLOWER Systems</u>			
Shore Maintained	10	10	10
Shipboard Maintained	136	136	136
ELF Transmitting Sites Operated and Maintained	2	2	2
MF/HF Multi-couplers Systems Maintained	10	10	10
VLF Amplifier Sites	1	1	1
Compact Very Low Frequency Support (M/Y)	2	2	2
TACAMO Support (M/Y)	15	9	9
SSBN Communications (M/Y)	11.1	11.1	11.1
Submarine Communications Improvement Program (SCIP)-Submarines Assessed	9	9	9
Integrated Submarine Automated Broadcast/ Improved Emergency Message Automated Transmission System (ISABPS/IEMATS-II) Upgrade planning sites	0	0	2

Activity Group: Strategic Communications (cont'd)

IV. <u>Personnel Summary.</u>	<u>FY 1987</u>	<u>FY 1988</u>	<u>FY 1989</u>
<u>End Strength</u>			
A. <u>Military</u>	1,384	1,581	1,595
Officer	212	250	269
Enlisted	1,172	1,331	1,326

Department of the Navy
Operation & Maintenance, Navy
Exhibit OP-05

Activity Group: Space Systems Operations
Budget Activity: 1 Strategic Forces

I. Description of Operations Financed.

The Naval Space Command (NAVSPACECOM) Dahlgren, Virginia, supports naval space policy and strategy by providing direct support to fleet units worldwide through integrated control of naval space programs. The Command coordinates Navy-wide operational space resources and personnel required to fulfill Fleet missions. While reflecting the Navy's reliance on space for maritime communications, navigation, environmental prediction and surveillance, it also provides an organizational structure for effective space coordination with other Department of Defense (DOD) elements. NAVSPACECOM is the naval component of the U.S. Space Command. NAVSPACECOM commands the operations of the Naval Space Surveillance System (NAVSPASUR) and the Navy Astronautics Group (NAVASTROGRU).

NAVSPASUR operates a large continuous wave radar system to detect and track satellites. Evaluated satellite information from this system supports over 600 activities, consisting of all Fleet units, various naval shore installations, and other departments of the Government. Data provided includes satellite overflight alerts; radar pointing angles; satellite ephemeral predictions; orbital elements (for input into shipboard computers); lock angles; orbit breakup fragments and "problem" satellites; and uncorrelated detection data. Primary mission for Fleet support is vulnerability data for United States Navy and Marine Corps operating forces. NAVSPASUR, as a force assigned to U.S. Space Command, provides 75% of the space surveillance data for the space object catalog maintained at the Space Surveillance Center (SSC) located at the Cheyenne Mountain Complex in Colorado. NAVSPASUR is also designated as the Alternate Space Surveillance Center (ASSC) with a backup control function for the entire Space Detection and Tracking Surveillance System (SPADATS). In the event of a failure at SSC, NAVSPASUR provides all support including command and control for each SPADAT sensor and maintains the space object catalog for the SSC. NAVSPASUR is also designated as the Alternate Space Defense Operations Center (ASPADOC) for U.S. Space Command. This includes responsibilities for monitoring potential space threats and disseminating information to the National Command Authority (NCA) and space community; aiding in the protection and restoration of space capabilities; involvement with space system protection operation plans; and space control support activities.

Navy Astronautics Group (NAVASTROGRU) maintains and operates astronautic systems, including spacecraft and ground based components and subsystems to fulfill naval and national requirements. The Navy Navigation Satellite System (NNSS) is the major operational space system to support navigation requirements of all Fleet units. Primary mission Fleet support is provided to FBM submarines, which impose the most stringent navigational accuracy requirements on NNSS. Expanded roles for NAVASTROGRU in spacecraft

Activity Group: Space Systems Operations (cont'd)

management include upgrade for Extremely High Frequency (EHF) operations support and use of existing ADP capabilities to obtain geolocation of Radio Frequency Interference (RFI). NAVASTROGRU is responsible for the Fleet Satellite Extremely High Frequency Program (FEP) and its operations centers (FEPOCs).

Additional NAVSPACECOM responsibilities include around-the-clock operational Fleet support and operational management of communications satellite capability for Fleet communications, operational management of Relocatable Over the Horizon Radar (ROTHR) and Tactical Exploitation of the National Capabilities (TENCAP) as well as support for several naval compartmented projects.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout:

	FY 1988			FY 1989		Change FY 88/89	
	FY 1987	Budget Request	Approp	Current Estimate	Initial Estimate		Amended Estimate
							Change
Naval Space Command Headquarters	5,657	4,211	4,124	4,208	4,260	4,465	257
Space System Product Management	10,821	12,482	12,409	12,601	13,395	13,524	923
Tracking, Telemetry and Control (TT&C); Operations	4,521	5,624	5,612	5,546	6,163	6,167	621
Total Naval Space Command	20,999	22,317	22,145	22,355	23,818	24,156	1,801

B. Reconciliation of Increases and Decreases.

1. FY 1988 Current Request

Amount

\$22,355

Activity Group: Space Systems Operations (cont'd)

715

2. Pricing Adjustment
 A. Annualization of FY 1988 Direct Pay Raise (56)
 1) Classified 54
 2) Wage Board 2
 B. FY 1989 Direct Pay Raise (168)
 1) Classified 166
 2) Wage Board 2
 C. Stock Fund (-11)
 1) Non-Fuel -11
 D. Industrial Fund Rates (-2)
 E. Other Pricing Adjustments (504)

-81

3. Functional Program Transfers
 A. Transfers Out (-81)
 1) Intra-Appropriation -81
 a) Transfer of the Navy Relocatable Over the
 Horizon Radar (ROTHER) Operation to the
 Fleet Operations Support Activity Group
 in Budget Activity 2.

1,524

4. Program Increases
 A. Annualization of FY 1988 Increases (294)
 1) Full workyear costs for civilian personnel 294
 increase in FY 1988.
 B. One-Time FY 1988 Costs (292)
 1) One-Time cost to evaluate available 292
 alternatives to the modernize Naval Space
 Surveillance System (NAVSPASUR) operations
 center which currently relies primarily on
 manual methods.

Activity Group: Space Systems Operations (cont'd)

C. Other Program Growth In FY 1989	(938)
1) Increase for Space Information Management System (SIMS) for Defense Data Network charges and for equipment maintenance as new equipment is accepted and the initial warranty period provided by the manufacturer expires.	395
2) Naval Space Command (NAVSPACECOM) is responsible for Space Training and Operations Procedures Standards (SPATOPS) which establish doctrinal connectivity, operational relationships and management responsibilities for satellite systems or a specific satellite subsystems component with peculiar capabilities. Increase will be used to develop concept of operations for a standardized Tracking, Telemetry and Control (TT&C) Navy capability.	377
3) Increase for material destruction devices, peripheral ADP equipment and secure facsimile equipment.	55
4) Increase to support space systems requirements planning and taskings emerging from U.S. Space Command.	111
5. Program Decreases	
A. One-Time FY 1988 Costs	(-185)
1) Decrease for one-time FY 1988 costs for furniture and equipment for establishment of new NAVSPACECOM Headquarters (MILCON Project P-233).	-185
B. Other Program Decreases in FY 1989	(-172)

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Activity Group: Space Systems Operations (cont'd)

- 1) Reduction for software development costs related to the Space Information Management Systems (SIMS). -70
- 2) Reduction for PCS costs allowed for civilian personnel in prior years based on expected efficiencies. -17
- 3) Reduction in civilian personnel costs due to decrease from 262 to 260 paid days. -85

6. FY 1989 Amended Estimate

\$24,156

III. Performance Criteria.

A. NAVIGATION (NNSS)

1. Monitoring Sites
Prospect Harbor, ME
Rosemont, MN
Wahiawa, HI
Laguna Peak, CA
2. Satellite Configuration
3. Injection Success

B. SURVEILLANCE

1. Transmitter sites
Lake Kickapoo, TX
Gila Lake, AZ
Jordan Lake, AL
2. Receiver Sites
Fort Stewart, GA
Silver Lake, MS
Red River, AK
Elephant Butte, NM
San Diego, CA
Hawkinsville, GA
3. Catalog Items

FY 1987

FY 1988

FY 1989

4

4

4

6
100%

6
100%

6
100%

3

3

3

6

6

6

7,675

8,575

9,585

Activity Group: Space Systems Operations (cont'd)

C. SATELLITE COMMUNICATIONS					
1. Operating Satellites in Orbit					6
2. System IOC Date		5			
FLTSATCOM FY 1978-(Fleet Satellite Communications)					
LEASAT FY 1985-(Leased Satellite)					
PEP FY 1987-(Fleet Satellite Extremely High Frequency Package)	98%				98%
3. Satellite Loading	131				154
4. No. of Circuits Available to Navy users					
				\$97	\$464
D. SPATOPS Cost (\$000)					
(Space Training and Operations Procedures Standards)					
Naval Space Command is responsible for the development of Space Training and Operations Procedures Standards (SPATOPS) which establish doctrinal connectivity, operational relationships and management responsibilities for all newly acquired space systems. Funding for SPATOPS funding is required 18-24 months prior to IOC of each new space system.					

IV. Personnel Summary.

<u>End Strength</u>				
A. <u>Military</u>				
Officer	145	158	155	
Enlisted	63	68	66	
	82	90	89	
B. <u>Civilian</u>				
USDH	284	319	319	
	284	319	319	

Department of the Navy
Operation & Maintenance, Navy
Exhibit OP-05

Activity Group: Command & Staff
Budget Activity: I Strategic Forces

I. Description of Operations Financed.

The purpose of this program is to provide the Fleet operational support required to permit Fleet Ballistic Missile (FBM) submarines to carry out their mission. Support provided includes material control and supply support, fleet temporary additional duty (TAD) for FBM crew rotations between continental United States and overseas sites and for crew training, and use of the Atlantic Underwater Test and Evaluation Center (AUTECH).

The submarine squadron and group commander staff requirements are also included. The staffs' mission is to operationally direct and administer material and logistic support and TAD.

The AUTECH range is used to conduct torpedo, Harpoon and TOMAHAWK proficiency firings, crew qualifications, and to test and certify shipboard weapon systems. The range is operated and managed by the Naval Underwater Systems Center (NUSC). Requested funds represent the direct costs for support of AUTECH range, open ocean firings, torpedo retrievals and post firing evaluations.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout:

	FY 1987	FY 1988		FY 1989		Change FY 88/89
		Budget Request	Approp	Current Estimate	Initial Estimate	Amended Estimate
Ship Ops Administration	2,161	2,250	2,208	2,207	2,379	2,371
Staff Administration	4,937	4,967	4,755	4,745	5,111	4,935
Ship Operations TAD	7,377	6,482	5,373	5,373	7,069	6,297
Control System Readiness	9,997	7,504	7,495	7,498	7,489	7,354
TOTAL Activity Group	24,472	21,203	19,831	19,823	22,048	20,957
					-1,091	1,134

Amount

B. Reconciliation of Increases and Decreases.

\$19,823

1. FY 1988 Current Estimate

484

2. Pricing Adjustments

A. FY 1989 Pay Raise
1) Classified (6)
6

B. Stock Fund (26)
1) Non-Fuel 26

235

C. Industrial Fund Rates

196

D. Other Pricing Adjustments

976

3. Program Increases

A. Other Program Growth in FY 1989 (976)

616

1) Increases in TAD for LANTFLT submarine crews undergoing TRIDENT crew training in Bangor, WA away from their homes; TRIDENT training includes training on TRIDENT II missile and maintenance training on the TRIDENT submarine.

168

2) Increases in the equipment, supplies, and logistical and non-technical equipment for the submarine squadrons and group staffs assigned to the TRIDENT base at Kings Bay, GA.

98

3) Supports an increase in the amount of leased equipment and service agreements for the equipment in conjunction with the build-up of the Kings Bay, GA, submarine base.

Activity Group: Command & Staff (cont'd)

- 4) Supports increased requirements for operational travel in support of training/planning conferences, fleet exercises, and intelligence briefings/debriefings; including additional supply, materials, labor saving devices and related administrative costs to maintain the increase in requirements.

94

-326

4. Program Decreases

A. One-Time FY 1988 Costs

(-1)

- 1) Reduction of two civilian workdays.

-1

B. Other Program Decreases

(-326)

- 1) Termination of a Contractor study comparing a desk top computer with the submarine fire control system.

-27

- 2) Termination of a contract for the installation of the Base Consolidation Communications System for the new facilities at Kings Bay, GA.

-190

- 3) Reduction in receipt, storage and segregation of administrative materials and supplies used by submarine staffs due to improvements in efficiencies.

-108

\$20,957

5. FY 1989 Amended Estimate

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Activity Group: Command & Staff (cont'd)

III. Performance Criteria.

A. <u>AUTEC/Combat System Support</u>			
Number of MK 48 Proficiency Firings	162	240	228
Pre-CO MK 48 Firings	93	92	92
B. Open ocean MK 48 Proficiency Firings	102	100	100
C. Per Diem Days	68,168	21,558	40,875
D. Number of Requisitions (Thousands)	472	514	522
E. Submarine Groups	4	4	4
F. Submarine Squadrons	4	4	4
G. Ships & Craft Assigned	47	47	47

FY 1987 FY 1988 FY 1989

IV. Personnel Summary.

<u>End Strength</u>			
A. <u>Military</u>	858	839	854
Officer	174	207	208
Enlisted	684	632	646
B. <u>Civilian</u>	13	11	11
USDH	13	11	11

FY 1987 FY 1988 FY 1989

Department of the Navy
Operation & Maintenance, Navy
Exhibit OP-05

Activity Group: Maintenance of Real Property
Budget Activity: I Strategic Forces

I. Description of Operations Financed.

This program provides maintenance, repair and minor construction for all buildings, structures, grounds and utility systems at strategic submarine bases and the Naval Space Command to permit assigned forces and tenants to perform their missions.

The major elements of this program are:

- o Facilities Maintenance - finances scheduled, day-to-day recurring maintenance, and emergency service work needed to preserve facilities.
- o Major Repairs - provides major repairs necessary to bring existing facilities into adequate condition to support assigned missions.
- o Minor Construction - finances the erection, installation or assembly of real property facilities; the addition, extension alteration, conversion or replacement of existing real property facilities; the relocation of real property facilities; and the installation of equipment which becomes part of a facility.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout.

	FY 1987		FY 1988		FY 1989		
	Budget	Request	Approp	Current	Initial	Amended	Change
				Estimate	Estimate	Estimate	FY 88/89
Facilities Maintenance	24,749	32,289	28,194	27,822	35,190	31,079	3,257
Major Repair Projects	2,877	2,109	2,262	2,017	2,135	2,679	662
Minor Construction	5,850	3,480	3,476	3,489	3,554	3,551	62
Total Activity Group	33,476	37,878	33,932	33,328	40,879	37,309	3,361

Activity Group: Maintenance of Real Property (cont'd)

	<u>Amount</u>
B. <u>Reconciliation of Increases and Decreases.</u>	
1. FY 1988 Current Estimate	\$33,328
2. Pricing Adjustments	
A. Annualization of FY 1980 Direct Pay Raise	(20)
1) Classified	3
2) Wage Board	17
B. FY 1989 Pay Raise	(40)
1) Classified	9
2) Wage Board	31
C. Stock Fund	(-2)
1) Non-Fuel	-2
D. Industrial Fund Rates	(1)
E. Annualization of FERS	(9)
I. Other Purchases	(1,171)
3. Program Increases	2,861
A. Other Program Increases in FY 1989	
1) Increase in support of new TRIDENT facilities	(1,543)
Kings Bay and new Naval Space Command Operation	
Center	
2) Increase in funding for maintenance of Extremely	(117)
Low Frequency facilities in Michigan and Wisconsin	
due to expanded use.	
3) Increase to apply toward decreasing the non-	(1,201)
deferrable Facilities Maintenance and Repair	
Backlog.	
4. Program Decreases	-119
A. Other Program Decreases in FY 1989	
1) Savings associated with increased oversight	(-107)
of MRP contracts by the Naval Facilities Engineering	
Command. Increased oversight is expected to lead	
to a lower rate of change orders and an improvement	
in design thereby reducing the cost of MRP contracts.	
2) Two less days of civilian employment in FY 1989.	(-12)
5. FY 1989 Amended Estimate	\$37,309

Activity Group: Maintenance of Real Property (cont'd)

III. <u>Performance Criteria.</u>	<u>FY 1987</u>	<u>FY 1988</u>	<u>FY 1989</u>
Backlog, Maint/Repair (\$000)	3,752	4,202	4,880
Total Buildings (KSF)	6,613	7,396	7,918

IV. <u>Personnel Summary.</u>	<u>FY 1987</u>	<u>FY 1988</u>	<u>FY 1989</u>
A. Civilian E/S			
USDH	34	34	34

Department of the Navy
Operation & Maintenance, Navy
Exhibit OP-05

Activity Group: Base Operations
Budget Activity: I Strategic Forces

I. Description of Operations Financed.

This program group provides the base support services and material required at strategic submarine bases and the Naval Space Command to permit assigned forces and tenants to perform their missions.

The major elements of this program are:

- o Utility Operations - Includes operating expenses for purchased electricity, electricity generating plants, purchased steam and hot water, heat plants, utility distribution systems, waste systems, air conditioning and refrigeration plants.
- o Personnel Operations - Support required for personnel related functions include expenses for:
 - Behavior Housing Operations and Furnishings - provides support for the operation of barracks and the purchase and maintenance of personnel support equipment related to this housing.
 - Other Personnel Support - provides for mess halls, sales activities, laundry and dry cleaning facilities. Previously separate sub-activity groups were consolidated under this sub-activity group. They were 1) Station Hospitals, Medical and Dental Clinics - direct and indirect health care costs for Health Care Facilities not under the financial control of the Navy Medical Command and 2) Human Goals - provides support for programs which focus on improving organizational and individual effectiveness and the administrative support of the Alcohol and Drug programs.
 - Morale, Welfare and Recreation - provides authorized appropriated fund support for shore based recreation activities.

- o Base Operations - Mission - Support for those Base Operations functions which are required in direct support of the mission of the base. For example, Fleet Training Support, Logistics Support, etc. Expenses are included for the following functions:

Retail Supply Operations - In addition to standard supply functions, this item includes the procurement, receipt, storage and issue of bulk liquid fuel, including operating aircraft fuel servicing facilities. Additionally, waterfront operations such as handling incoming and outgoing cargo and loading/unloading live ammunition onto and from combatant vessels are included.

Activity Group: Base Operations (cont'd)

- Maintenance of Installation Equipment - provides for maintenance of major shore based equipment including: service and miscellaneous craft, construction equipment (non-deployable), weapons, electronics, electronic engineering, and fleet moorings.
- Other Base Services - provides for the maintenance and operation of vehicles/other transportation equipment, port services (includes navigational assistance to ships, operation of service craft, degaussing operations, and oil spillage cleanup).
- o Base Operations - Ownership - Support required at shore bases regardless of type of mission being performed which must be sustained to have a functioning base. Expenses are included for the following functions:
 - Other Engineering Support - Public Works Department Administration, engineering services, custodial services, refuse/garbage collection and disposal, snow removal, rental and leasing of real property, and fire protection and firefighting for Naval activities and their tenants. The sub-activity group Hazardous Waste Material Handling was consolidated into this sub-activity group and includes personnel, supplies and training associated with the identification and disposal of hazardous wastes.
 - Administration - provides support related to financial/resource management, civilian manpower management, and maintaining military personnel records.
 - Automated Data Processing - provides analysis programming, equipment rental, operations and maintenance, contractual services and supplies.
 - Audiovisual - provides supplies and services required for audiovisual support.
 - Physical Security - provides shore base physical security.

Activity Group: Base Operations (cont'd)

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout.

	FY 1987	FY 1988		FY 1989		Change FY 88/89
		Budget Request	Approp	Current Estimate	Initial Estimate	Amended Estimate
Base Communications	3,171	5,790	5,790	4,186	5,241	4,842
Utility Ops	16,700	22,625	19,989	19,159	24,809	21,481
Personnel Ops	8,172	9,439	9,262	9,265	10,865	10,603
Base Ops, Mission	27,099	28,102	27,095	27,106	31,549	29,754
Ownership Ops	39,162	43,057	41,247	40,982	45,864	44,032
Total Activity Group	94,304	109,013	97,593	100,698	118,328	110,712
						10,014

B. Reconciliation of Increases and Decreases.

	Amount
1. FY 1988 Current Estimate	\$100,698
2. Pricing Adjustments	3,200
A. Annualization of FY 1988 Direct Pay Raise	(277)
1) Classified	200
2) Wage Board	77
B. FY 1989 Direct Pay Raise	(357)
1) Classified	276
2) Wage Board	81
C. Stock Fund	(-216)
1) Non-Fuel	-216
D. Industrial Fund Rates	(1)
E. Annualization of FERS	(134)
F. Health Benefits	(30)
C. Other Purchases	(2,617)
3. Functional Transfers	-413
A. Transfers-Out	(-413)
1. Intra-Appropriation	-23
a) Navy Legal Services Office BANGOR from PACFLT to BA 9.	

Activity Group: Base Operations (cont'd)

b) Realignment of crane operators and riggers to Trident Refit Facility Mission Support.	-390	
4. Program Increases		7,765
A. Other Program Increases in FY 1989	(7,765)	
1) Costs for utilities, operation and other engineering support for new facilities coming on line during the fiscal year at SUBASE Bangor. Also additional support for crane certification, underwater inspections, other personnel support, MWR and hazardous waste.	772	
2) Increase in support of TRIDENT facilities at Kings Bay due to increase in facilities and personnel: Utilities (1,741), Personnel Ops (974), Base Ops Mission (2,852), Base Ops Ownership (945), and Base Communications (145).	6,557	
3) Increase for Bases and Stations Information System support.	336	
5. Program Decreases		-538
A. Other Program Decreases in FY 1989	(-538)	
1) Projected end-strength and dollar savings resulting from scheduled Efficiency Reviews.	-173	
2) Reduction in energy use due to energy conservation efforts.	-147	
3) Civilian Personnel - two less paid days in FY 1989.	-173	
5. FY 1989 Amended Budget Request		\$110,712

Activity Group: Base Operations (cont'd)

III. Performance Criteria.

	<u>FY 1987</u>	<u>FY 1988</u>	<u>FY 1989</u>
Operations of Utilities			
Total Energy Consumed (MBTU's)	3,496,604	3,531,570	3,565,085
Total Non-Energy Consumed (000 Gal)	1,281,000	1,352,545	1,429,749
Base Communications			
Number of Instruments	5,475	6,112	6,212
Number of Mainlines	3,671	4,271	4,321
Daily Average Msg Traffic	4,298	4,398	4,423
Personnel Operations			
Bachelor Housing (\$000)	776	1466	1515
No. of Officer Quarters	89	133	133
No. of Enlisted Quarters	2,172	2,194	2,482
Other Personnel Support (\$000)	3,299	4,041	5,228
Population Served, Total	58,976	63,511	64,404
(Military, E/S)	8,068	9,206	9,919
(Civ/Dep, E/S)	50,908	54,305	54,485
Morale, Welfare & Recreation (\$000)	4,097	72,273	74,154
Population Served, Total	70,925	72,273	74,154
(Military, E/S)	7,866	8,899	9,500
(Civ/Dep, E/S)	63,059	63,374	64,654
Base Operations, Mission			
Retail Supply Operations (\$000)	6,355	6,701	7,780
Line Items Carried	93	123	113
Receipts (000)	139	140	134
Issues (000)	157	159	160
Maintenance of Installation Equip (\$000)	2,510	1,241	812
Other Base Services (\$000)	18,234	19,164	21,162
No. of Motor Vehicles, Total	1,863	1,961	1,966
(Owned)	1,495	1,606	1,611
(Leased)	368	355	355
Ownership Operations			
Other Engineering Support (\$000)	16,165	21,010	22,037
Administration (\$000)	15,203	12,366	14,479
Number of Bases, Total	3	3	3
(CONUS)	3	3	3
(Overseas)	0	0	0

Activity Group: Base Operations (cont'd)

IV. <u>Personnel Summary.</u>	<u>FY 1987</u>	<u>FY 1988</u>	<u>FY 1989</u>
A. <u>Military E/S</u>	<u>609</u>	<u>596</u>	<u>1,502</u>
Officer	78	81	139
Enlisted	531	515	1,363
B. <u>Civilian E/S</u>			
USDH	755	858	830

SUMMARY OF REQUIREMENTS BY ACTIVITY GROUP

Budget Activity 2: General Purpose Forces

	FY 1987			FY 1988			FY 1989		
	Personnel E/S		O&MN	Personnel E/S		O&MN	Personnel E/S		O&MN
	Mil	Civ	Funding	Mil	Civ	Funding	Mil	Civ	Funding
TACAIR/ASW Operations	44,138	306	1,703,926	46,147	351	1,489,592	45,150	351	1,363,909
Fleet Air Support	10,315	22	396,762	11,571	24	303,159	11,668	24	302,651
Ship Operations	192,314	0	2,042,315	201,708	0	1,879,000	204,111	0	1,833,500
Ship Maint. & Modern.	8,906	352	4,932,707	8,718	446	4,397,088	8,890	461	4,505,293
Combat Support Forces	12,715	194	136,541	10,857	199	97,989	11,019	199	94,300
Fleet Operations Support	4,672	82	173,285	5,102	110	188,784	5,250	112	383,745
Other Warfare Support	360	67	56,940	418	63	52,725	414	67	59,022
Fleet Air Training	16,836	407	473,296	17,070	497	459,349	16,577	488	436,670
Fleet Ship Training	2,027	87	47,979	2,082	98	42,045	2,100	98	43,075
Unified Commands	822	243	44,572	844	276	23,432	851	279	25,474
Fleet Command & Staff	11,262	1,464	107,633	11,134	1,501	98,084	10,945	1,501	93,187
Cruise Missile	72	234	104,641	0	0	106,277	0	0	119,208
Maint. of Real Property	502	2,444	544,138	477	2,268	416,905	474	2,151	378,154
Base Operations	28,695	21,682	1,283,134	28,993	21,849	1,272,001	28,861	21,484	1,354,990
Foreign Currency	0	0	142,700	0	0	0	0	0	0
Coast Guard Support	0	0	75,000	0	0	0	0	0	0
AVDLR Credits	0	0	-329,029	0	0	0	0	0	0
Total BA-2	333,636	27,584	11,936,940	345,121	27,682	10,826,430	346,310	27,215	10,993,178

Department of the Navy
Operation and Maintenance, Navy

Budget Activity: II - General Purpose Forces (Summary)

I. Description of operations financed.

The Navy's mission in General Purpose Forces is to provide combat ready fleet forces capable of conducting strike operations to ensure control of the sea and air in the event of war. In FY 1988 this program includes 499 general purpose ships and increases to 507 in FY 1989. The average operating aircraft decrease from 3,524 in FY 1988 to 3,499 in FY 1989. In addition this program funds a network of shore installations and commands. These forces, operating under the control of the unified and specified commanders, deploy to the Indian Ocean; northern, eastern, and western Pacific; north Atlantic; central and eastern Mediterranean; Caribbean and Central America regions.

The General Purpose Naval Force is comprised of 499 units in FY 1988, including 14 aircraft carriers, 3 battleships, 189 surface combatants, 101 submarines, 62 amphibious force ships, 11 patrol and mine warfare ships, 58 combat logistic and 61 support force ships. In FY 1989 the General Purpose Naval Forces is comprised of 507 units, including 14 aircraft carriers, 4 battleships, 184 surface combatants, 103 submarines, 65 amphibious force ships, 12 patrol boats and mine warfare ships, 20 combat logistic and 65 support force ships.

During FY 1988, the ship operations program supports the introduction of 10 new ships and three reactivations. Additions to the conventionally powered fleet include 2 TICONDEROGA class guided missile cruisers, 1 dock landing ship, 1 CV from SLEP, 2 fleet oilers, 2 mine countermeasure ships, and 2 reactivated fleet tugs. The nuclear powered fleet will receive 3 new nuclear attack submarines of the 688 class. During FY 1989, the ship operations program supports the introduction of 15 new ships and one reactivation. Increases in the conventionally powered fleet include 2 TICONDEROGA class guided missile cruisers, 1 PERRY class guided missile frigate, 2 dock landing ships, 1 amphibious assault ship, 1 battle ship reactivation, 3 mine countermeasure ships, and 2 fleet oilers. The nuclear powered fleet gains 4 nuclear attack submarines of the 688 class. The FY 1988 and FY 1989 operating tempo is level for non-deployed and deployed at 29 and 50.5 days per quarter, respectively.

The General Purpose Forces flying hour program includes 944 thousand hours in FY 1989 to allow combat aircrews (both Navy and Marine) to maintain proficiency to conduct operations at 87% Primary Mission Readiness (PMR), including 2% simulators. PMR represents the flying hours available to keep the crews qualified to perform their primary mission in assigned aircraft. The program also includes 255 thousand flying hours for aircrew training in the Fleet Readiness Squadrons (FRS) and 186 thousand for fleet air support operations.

The Ship Maintenance and Modernization Program represents a major expense of this budget activity and provides for regular overhauls, alterations, non-scheduled repairs, intermediate maintenance, outfitting, berthing and messing, and technical support for the naval forces. The \$4.5 billion programmed in FY 1989 provides for major overhauls to 23 ships, including 4 submarines, 11 surface combatants, and 8 other ships. The trend of using fewer overhauls and more restricted and technical availabilities, which provides more frequent but shorter duration depot repair periods, is accelerated in the FY 1989 Program. In FY 1989, the introduction of the SSN-688 Class Depot Modernization Program takes place, starting with 3 depot availabilities. Also provided are voyage repair support to operating units; material required to perform prescribed intermediate level maintenance; modernization which includes design and installation of new equipments or systems to enhance capability or effectiveness of major combat systems, communications and other mission-essential ship systems during overhaul and emphasizes upgrading defensive and offensive capabilities, combat systems, detection sonars and weapon systems to improve combat readiness; technical support to monitor ships for which overhaul cycles have been extended under the Engineered Operating Cycle (EOC) program and for upgrading of ships and ship equipments; associated costs for initial outfitting of ship's repair parts and equipment; and required berthing and messing for crews during major overhaul. We have allocated large budget reductions to the Fleet Modernization Program (FMP) in FY 1988 and 1989, recognizing that the improvements originally planned are necessary, but must be deferred in order to fund must pay bills and direct readiness costs. It may be necessary to restructure this program in execution if the reductions are unexecutable, and this restructure may require that funds be reprogrammed.

The Base Operations and Maintenance of Real Property programs provide support services and maintenance, repair, and minor construction for a world-wide complex of shore installations required to support fleet operational units. These installations encompass air facilities, ranges, naval stations, and support installations such as island facilities at Diego Garcia, Indian Ocean Littoral, and NATO Infrastructure costs associated with the Navy's use to NATO facilities.

The balance of this budget activity pays the operations costs of special combat forces, mobile construction battalions, support of unified and operational commands, ship and aircraft support programs such as travel for fleet personnel, undersea surveillance, and the cruise missile program.

All available audit savings have been incorporated into the following budget estimates.

II. Financial Summary (Dollars in Thousands)

A. Activity Group Breakout

	FY 1988			FY 1989		
	FY 1987	Budget Request	Apppr.	Current Estimate	Initial Estimate	Change
TACAIR/ASV						
Operations	1,703,926	1,496,615	1,508,381	1,489,592	1,529,764	-165,855
Fleet Air Support	396,762	293,487	290,526	303,159	305,144	-2,493
Ship Operations	2,042,315	1,783,442	1,826,537	1,879,000	1,871,468	-37,968
Ship Maintenance & Modernization	4,932,707	4,638,914	4,424,762	4,397,088	4,945,581	-440,288
Combat Support						
Forces	136,541	86,897	97,272	97,989	93,657	+643
Fleet Operations Support	173,285	209,190	199,227	188,784	229,747	+153,998
Other Warfare	56,940	59,782	54,291	52,725	65,258	-6,236
Support	473,296	415,577	401,777	459,349	461,822	-25,152
Fleet Air Training	47,979	44,077	42,157	42,045	43,580	-505
Fleet Ship Training	44,972	24,250	23,081	23,432	25,097	+377
Unified Commands						
Fleet Command & Staff	107,633	107,374	101,326	98,084	105,159	-11,972
Cruise Missile	104,641	106,277	106,277	106,277	116,833	+2,375
Foreign Currency	142,700	0	0	0	0	0
Maintenance of Real Property	544,138	484,171	427,221	416,905	392,487	-14,333
Base Operations	1,283,134	1,326,428	1,283,415	1,272,001	1,393,577	-30,587
Coast Guard Spt	75,000	0	0	0	0	0
AVDLR Credits	-329,029	0	0	0	0	0
Total	* 11,936,940	11,076,481	10,786,251	10,826,430	11,579,174	-585,996
						10,993,178 +166,748

* Does not include \$369.7 million for Ship Maintenance and Modernization unobligated on 30 September 1987 but required for completion of private repair contracts executed under Technical Operating Budget (TOB) procedures and for changes in scope of ship overhaul, maintenance, and repair for work inducted in FY 1987 in accordance with authority of 10 U.S.C. 114.

B. Schedule of Increases and Decreases.

\$11,076,481

1. FY 1988 President's Budget Request

-290,230

2. Congressional Adjustments

A. Inflation	-35,718
B. Travel	-14,616
C. Base Operations Support	-38,927
D. Cancel Submarine PSAs	-12,700
E. Yearly Pricing	-19,340
F. Flying Hours	-14,000
G. Ship Operations	-5,300
H. MVR Support	-6,348
I. Headquarters Operations	-4,807
J. Depot Maintenance	-135,400
K. Leased Telecommunications	-7,400
L. ADP Operations	-1,911
M. Command, Control, & Comm.	-7,000
N. Savings	-30,400
O. Persian Gulf Operations	77,000
P. Expense/Investment Criteria	-5,464
Q. Submarine Silencing	24,900
R. Contractor Support	-16,389
S. Manpower Savings	-10,633
T. USS STARK Lessons Learned	31,000
U. Japanese Defense Contribution	-22,879
V. Student Dependent Travel	-398
W. USS MIDWAY Maintenance	-25,000
X. Training	-3,500
Y. Other Fleet Support	-5,000

10,786,251

3. FY 1988 Appropriation

180,619

4. Pricing Adjustments

A. Annualization of FY 1987 Pay Raises	(3,399)
1) Clerical	3,349
2) Foreign National	50
B. Direct Pay Raises	(16,625)
1) Classified	6,525
2) Wage Board	1,273
3) Foreign National Direct Hire	8,827

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C. Stock Fund	(138,969)	
1) Fuel	138,969	
D. Industrial Fund Rates	(21,626)	33,836
5. Other Increases		
A. Program Increases	(33,836)	
1) Increase in cost per flying hour based on prior year experienced costs.	33,836	
6. Other Decreases		-174,276
A. Program Decreases	(-174,276)	
1) FERS Participation Rate	-5,396	
2) Reduction in number of flying hours	-16,973	
3) Elimination of Inactive Fleet ship maintenance effort.	-18,374	
4) Early retirement of FF-1040 and FFG-1 classes.	-16,500	
5) Reduced outfitting effort.	-30,600	
6) Reduced Ship Modernization effort.	-86,433	
7. FY 1988 Current Estimate		10,826,430
8. Pricing Adjustments		-95,443
A. Annualization of Direct Pay Raise	(23,006)	
1) Classified	9,217	
2) Wage Board	2,973	
3) Foreign National Direct Hire	10,816	
B. Direct Pay Raise	(12,261)	
1) Classified	6,131	
2) Wage Board	1,349	
3) Foreign National Direct Hire	4,781	
C. Stock Fund	(-283,836)	
1) Non-Fuel	-283,836	
D. Industrial Fund	(44,627)	
E. Other Pricing Adjustments	(118,490)	
9. Functional Program Transfers		179,460
A. Transfers-In	(181,296)	
1) Inter-Appropriation	3,800	
a) Transfer of Contractor Support Services for Cruise Missile from	(3,800)	

Weapons Procurement, Navy (VPN)

appropriation.

- 2) Intra-Appropriation 177,498
 - a) SOSUS/SURTASS Program transfer (175,443)
 - from Budget Activity 7.
 - a) Communication/Tactical (CONTAC) (1,103)
 - publications from Budget Activity 9.
 - b) Bachelor Enlisted Quarters Mare (409)
 - Island operations from Budget
 - Activity 8.
 - c) Authorized Accounting Activity (445)
 - (AAA) transfers from Budget Activities
 - 7 (299) and 8 (146).
 - d) Other transfers (98)
- B. Transfers-Out (-1,838)
 - 1) Intra-Appropriation (-1,838)
 - a) Transfer Kenya U.S. Liaison Office (-700)
 - (KUSLO) communications unit to Budget
 - Activity 3.
 - b) Transfer of Standard Level User (-143)
 - Charges (SLUC) to Budget Activity
 - 9 for Navy Internal Relations.
 - c) Transfer BOS for medical clinics (-658)
 - in Argentina, Bravdy and London (UK)
 - to Budget Activity 8.
 - d) Other transfers (-337)

1,161,760

10. Program Increases

- A. Program Increases in FY 1989 (1,161,760)
 - 1) TACAIR/ASW Operations 61,862
 - 2) Fleet Air Support 17,299
 - 3) Ship Operations 78,325
 - 4) Ship Maintenance & Modern. 848,485
 - 5) Combat Support Forces 4,609
 - 6) Fleet Operations Support 24,378
 - 7) Other Warfare Support 4,420
 - 8) Fleet Air Training 40,303
 - 9) Fleet Ship Training 2,784
 - 10) Unified Commands 837
 - 11) Fleet Commands and Staffs 190
 - 12) Cruise Missile 9,420

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11) Maintenance of Real Property	1,400	
14) Base Operations	67,448	
		-1,079,329
11. Program Decreases		
A. Program Decreases in FY 1989	(-1,079,029)	
1) TACAIR/ASW Operations	-69,770	
2) Fleet Air Support	-4,826	
3) Ship Operations	-97,449	
4) Ship Maintenance & Modern.	-743,350	
5) Combat Support Forces	-7,262	
6) Fleet Operations Support	-29,868	
7) Other Warfare Support	-1,041	
8) Fleet Air Training	-35,291	
9) Fleet Ship Training	-3,028	
10) Unified Commands	-87	
11) Fleet Commands and Staffs	-6,743	
12) Cruise Missile	-3,728	
13) Maintenance of Real Property	-54,691	
14) Base Operations	-21,895	
12. FY 1989 Amended Budget Request		\$10,993,176

Department of the Navy
Operation & Maintenance, Navy

Activity Group: TACAIR/ASU
Budget Activity: II - General Purpose Forces

I. Description of Operations Financed.

This program provides funds for Navy/Marine Corps Tactical Air (TACAIR) and aviation Anti-Submarine Warfare (ASU) forces at a level of readiness which will enable them to perform their primary mission as required in support of national objectives. Tactical squadrons conduct strike operations against a wide range of threats identified in the national strategy and provide long range and local protection against airborne and surface threats. Anti-Submarine Warfare Squadrons locate, destroy and provide force protection against sub-surface threats, and conduct maritime surveillance operations.

Aviation Intermediate Maintenance Department's (AIMD's). This program funds the pay of civilian personnel and day to day operations at the AIMD's.

Primary Mission Readiness (PMR). The peacetime goal for PMR is 88% (including simulators). The FY 1987, FY 1988 and FY 1989 PMR levels are at 87%, which includes a 2% simulator contribution. Although PMR levels below the 88% goal result in less than optimum readiness, deployed crews and crews in vorkup receive at least 100% PMR, while non-deployed crews fly at reduced levels. Funds requested include the cost of petroleum, oil, and lubricants (POL); organizational and intermediate (O&I) maintenance, squadron supplies, and Aviation Depot Level Repairs. The cost per operating hour for each type/model aircraft is based on actual experience over the previous 18 months.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout.

	FY 1987	Budget Request	FY 1988	FY 1989	Amended Estimate	Change FY 88/89
			Approp	Current Estimate	Initial Estimate	Change
Aircraft Ops	1,694,165	1,486,551	1,498,551	1,479,944	1,519,371	-165,632
AIMD	9,761	10,064	9,830	9,647	10,393	-223
Less AVDIR Credits	-250,814	0	0	0	0	0
Total Act. Group	1,453,112	1,496,615	1,508,381	1,489,591	1,529,764	-165,855
					1,363,909	-125,682

Activity Group: TACAIR/ASW (cont'd)

<u>Reconciliation of Increases and Decreases.</u>		<u>AMOUNT</u>
3. Reconciliation of Increases and Decreases.		
1. FY 1988 Current Estimate		\$1,489,591
2. Pricing Adjustments		
A. Annualization of FY 1988 Direct Pay Raise	(61)	
1) Classified	11	
2) Wage Board	43	
3) Foreign National Direct	7	
B. FY 1989 Direct Pay Raise	(82)	
1) Classified	18	
2) Wage Board	35	
3) Foreign National	29	
C. Stock Fund	(-118,021)	
2) Non-Fuel	-118,021	
D. Foreign National Indirect Hire Pay Raise	(36)	
E. Other Pricing Adjustments	(68)	
3. Program Increases		61,862
A. Annualization of FY 1988 Increases	(50)	
1) Increase in contract costs for operation of transient flight lines necessitated by loss of military billets in this function.	50	
B. Other Program Increases in FY 1989		
1) <u>Aircrew Manning</u> . Increase in flying hours to reflect one percent improvement in Navy aircrew manning from 96.5% of requirement to 97.5%.	(61,812)	
2) <u>F/A-18 (HORNET)</u> . Increase in hours associated with Navy and Marine Corps F/A-18 transition training (from F-4 and A-7 to F/A-18).	9,066	
3) <u>AV-8B (HARRIER)</u> . Increase supports transition training from A-4 for 28 additional aircrews.	22,048	
4) <u>SH-60B (LAMPS MK III)</u> . Increased hours to support additional training requirements for 28 additional aircrews resulting from new squadron stand-ups.	11,104	
5) <u>A-6E (INTRUDER)</u> . Supports increase in A-6 hours resulting from the stand-up of new squadrons (6 additional crews).	10,805	

Activity Group: TACAIR/ASW (cont'd)

6) EA-6B (PROVLER). Increase supports aircrew training requirements for 5 additional crews. 4,152

5) Higher average cost per hour resulting from a change in the mix of aircraft required for aircrew training and operational commitments. 1,275

-69,770

4. Program Decreases

A. One-Time FY 1988 Costs (-4)

1) Two less workdays of civilian employment in FY 1989. -4

B. Other Program Decreases (-69,766)

1) A-7E (CORSAIR). Decreased hours due to continued Navy F/A-18 transition. -16,334

2) F-4 (PHANTOM). Decreased hours due to Marine Corps transition to F/A-18. -3,460

3) A-4 (SKYHAWK). Decreased hours associated with Marine Corps transition to AV-8B. -5,655

4) 14th Airwing Stand-down. Reduction of 24,834 hours due to the stand-down of one active carrier airwing by the beginning of FY 1989. -44,317

5. FY 1989 Amended Estimate \$1,363,909

III. Performance Criteria

A. Aircraft Operations

	FY 1987			FY 1988		
	Average Operating Aircraft	Flying Hours	Cost (\$000)	Average Operating Aircraft	Flying Hours	Cost (\$000)
Total	2,306	927,276	\$1,697,218	2,356	948,432	\$1,479,944
Hours Per A/C		402			403	
\$ per Hour		\$1,831				\$1561

Activity Group: TACAIR/ASW (cont'd)

FY 1989			
Average	Flying	Cost	
Operating	Hours	(\$000)	
Aircraft			
2,315	944,318	\$1,353,739	
Total			
Hours Per A/C	408		
\$ Per Hour		\$1,434	

IV. Personnel Summary.

End Strength (E/S).	FY 1987	FY 1988	FY 1989
A. Military	44,138	46,147	45,150
Officer	5,716	6,219	6,226
Enlisted	38,422	39,928	38,924
B. Civilian	306	351	351
USOH	215	226	226
FNDH	63	97	97
FNIH	28	28	28

Department of the Navy
Operation and Maintenance, Navy

Activity Group: Fleet Air Support
Budget Activity: II - General Purpose Forces

I. Description of Operations Financed.

This program provides funds for those support functions necessary to achieve and maintain the required operational capabilities of fleet squadrons, as follows:

- o Flying Hours. Provides flying hours for electronic warfare (EW) services, aggressor aircraft, ship and shorebased air logistic support, drug interdiction support and special test and evaluation support. Funds requested include the cost of petroleum, oil, and lubricants (POL); organizational and intermediate (O&I) maintenance, aviation depot repairables, and squadron supplies. The cost per operating hour for each type/model aircraft is based on actual experience over the previous 18 months.
- o Air TAD. Funds for Temporary Additional Duty requirements in support of operational missions of TACAIR/ASW and other support squadrons including transportation, per diem and miscellaneous expenses.
- o Other Aircraft Support. Includes costs not specifically identifiable to the Flying Hour Program. For example, Individual Material Readiness List (IMRL) Outfitting Funds are used to finance initial issues of Ground Support Equipment. These items are used by aviation activities to perform organizational and intermediate levels of aircraft maintenance. The activities' IMRL is a tailored allowance list which is updated annually to support modified equipment or the introduction of new or addition aircraft/system. Also, the operation and maintenance of drones, transportation of squadron supplies/equipment during squadron rotations are included in this activity group.

Activity Group: Fleet Air Support (cont'd)

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout:

	FY 1988			FY 1989			Change FY 88/89
	FY 1987	Budget Request	Current Estimate	Initial Estimate	Change	Amended Estimate	
Aircraft Ops	265,540	180,283	192,651	186,871	+3,131	190,002	-2,649
Air TAD	51,050	41,188	39,966	42,997	-3,031	39,966	0
Other Aircraft Sup	80,172	72,016	70,543	75,276	-2,593	72,683	+2,140
Less AVDLR Credits	-36,988	0	0	0	0	0	0
Total Act. Group	359,774	293,487	303,160	305,144	-2,493	302,651	-509

Activity Group: Fleet Air Support (cont'd)

	Amount
B. Reconciliation of Increases and Decreases.	
1. FY 1988 Current Estimate	\$303,160
2. Pricing Adjustments	
A. Annualization of FY 1988 Direct Pay Raise	(2)
(1) Classified	2
B. FY 1989 Direct Pay Raise	(9)
(1) Classified	8
(2) Foreign National Direct	1
C. Stock Fund	
1) Non-Fuel	(-16,209)
D. Industrial Fund Rates	-16,209
E. Other Purchased Services	(1,232)
	(1,984)
3. Program Increases	
A. Annualization of FY 1988 Increases	(5,221)
1) Expansion of the Remotely Piloted Vehicle Program from 2 to 6 units. Operational units will assume all maintenance responsibility which previously was provided by contract.	1,265
2) <u>Essential Training</u> . Increase for essential training such as weapons detachments and exercise participation, as well as new squadron support (HS-1, Sea Det 3 Shorebasing, F/A-18 squadrons, and HSL squadrons).	543
3) <u>Initial Outfitting</u> . Provides for initial outfitting as squadrons continue to transition from the F-4 and A-7E to the F/A-18 and from the A-4 to the AV-8B.	3,413
B. Other Program Growth in FY 1989	(12,078)
1) <u>CT-39</u> . Increase provides for conversion from a site-support maintenance contract to full contract maintenance for the CT-39 aircraft. Based on a Naval Audit Service recommendation, an economic analysis was performed and determined that the small population of CT-39s made a maintenance contract more economical than in-house maintenance.	3,044
2) <u>Carrier/Vertical On-Board Delivery (COD/VOD)</u> . Increase provides for Carrier/Vertical On-Board Delivery (COD/VOD) support required to ensure	1,864

Activity Group: Fleet Air Support (cont'd)

timely provisioning of spares/repair parts, etc. to deployed squadrons.	
3) <u>Airborne Mine Countermeasures (AMCM).</u>	1,665
<u>Increase for AMCM flying hours reflects continuation of the transition from RH-53 to MH-53 helicopters including the introduction of 5 new MH-53E helicopters into the fleet.</u>	
4) <u>Fleet Tactical Support. Increase in A-4 flying hours required to provide "orange air" services during battlegroup and airwing workups. The transition from A-7s to F/A-18s requires additional battlegroup adversary support due to the fighter/attack role of the F/A-18 vice solely the attack /role of the A-7.</u>	1,750
5) <u>Contract Maintenance. Increase in contract maintenance costs for the UC-12, CT-39, and the F-5 due to increases in number of aircraft supported and conversion of the CT-39 contract from supply support to full contract maintenance.</u>	3,755
4. <u>Program Decreases</u>	
A. <u>Other Program Decreases in FY 1989</u>	(-4,826)
1) <u>Other Aircraft Support. Decrease in Initial Material Readiness List (IMRL) requirements in support of outfitting new aircraft, Ground Support Equipment (GSE), and new aircraft systems.</u>	-1,944
2) <u>Flying Hours. Decrease in funding required for fleet air support flying hours due to a change in the overall mix of hours required in FY 1989.</u>	-2,222
3) <u>Airborne Mine Countermeasures(AMCM). Decrease in flying hours for the RH-53 helicopter due to the continued transition from RH-53 to MH-53 helicopter.</u>	-660

-4,826

\$302,651

5. FY 1989 Amended Estimate

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Activity Group: Fleet Air Support (cont'd)

III. Performance Criteria

A. Aircraft Operations

	FY 1987			FY 1988		
	Average Operating Aircraft	Flying Hours	Cost (\$000)	Average Operating Aircraft	Flying Hours	Cost (\$000)
Total	450	217,544	\$274,189	462	179,028	\$192,650
Hours Per A/C		483			388	
\$ per Hour			\$1,261			\$1,077

	FY 1989		
	Average Operating Aircraft	Flying Hours	Cost (\$000)
Total	479	185,821	\$190,002
Hours Per A/C		388	
\$ Per Hour			\$1,023

	FY 1987		FY 1988		FY 1989	
B. TAD Per Diem Days	2,571,819		2,022,236		2,022,236	
C. MAC-SAAM Flying Hours	13,481		13,646		13,646	
D. Units Receiving IMRL	326		330		334	
E. Drones Maintained	485		493		493	

IV. Personnel Summary.

End Strength

	FY 1987		FY 1988		FY 1989	
A. <u>Military</u>	10,315		11,571		11,668	
Officer	1,279		1,551		1,578	
Enlisted	9,036		10,020		10,090	
B. <u>Civilian</u>	8		22		24	
USDH	8		22		24	

Department of the Navy
Operation & Maintenance, Navy

Activity Group: General Purpose Ship Operations
Budget Activity: II - General Purpose Forces

I. Description of Operations Financed.

This program provides resources for operating tempo, organizational level repairs, training exercises and associated support required to continuously deploy fully combat ready ships in support of national objectives and to ensure control of the sea.

The General Purpose Naval Force is comprised of 499 units in FY 1988, including 14 aircraft carriers, 3 battleships, 189 surface combatants, 101 submarines, 62 amphibious force ships, 11 patrol and mine warfare ships, 58 combat logistics ships and 61 support force ships. In FY 1989 the General Purpose Naval Force is comprised of 507 units, including 14 aircraft carriers, 4 battleships, 184 surface combatants, 103 submarines, 65 amphibious force ships, 12 patrol boats and mine warfare ships, 60 combat logistic and 65 support force ships. Funding provides fossil fuel, utilities, supplies and equipment (S&E), nuclear material consumption and nuclear core reprocessing and charter of lease back units, as follows:

Ship's Fuel - includes ship propulsion fuel to operate the main engines of the conventionally powered ship's, auxiliary diesel engines of nuclear vessels, auxiliary equipment and small boats.

Ship's Utilities - includes the cost of steam, electricity, water, sewage treatment and other utilities (excluding telephone and garbage removal) incurred by active fleet ships and certain centrally managed service craft while partially or totally "cold iron" in port.

Supplies and Equipment (S&E) - includes repair parts and other operating target costs:

Repair Parts (organizational maintenance) funding provides parts and repair related consumables required to accomplish organization level equipment maintenance. Organizational level maintenance is that corrective and preventive maintenance accomplished by the ship's crew. This is the lowest level of maintenance achievable, is cost effective in that the ship's work force performs the repairs, and is directly related to the readiness of the operating units.

Other Operating Target (OPTAR) funding includes administrative and housekeeping items; and items having a limited life such as lubricants, boiler compound, and bilge cleaner; equipment items, such as damage control pumps and blowers; labor saving devices such as power tools, office machines, duplicators;

Activity Group: General Purpose Ship Operations (cont'd)

general purpose test equipment; Automated Data Processing (ADP); the cost of tugs, pilotage, and other related services provided by commercial or other non-naval forces; and the cost of material purchased for medical and dental purposes.

Leaseback (Charter) includes costs associated with leasing stores ships (TAFS) which provides dry cargo resupply for ships on station in operating areas, oilers (TAOs) which provide complete replenishment of petroleum products at sea, ocean tugs (TATFs) which operate as units of the Mobile Logistics Salvage Forces and take in tow Navy ships which have battle damage or are otherwise inoperable, and the ammunition ship (TAE) which provides rapid transfer of missiles and other munitions to ships alongside or with helicopters. Leaseback costs include maritime crew salaries, fuel ship repairs, supplies and equipage, conversion as applicable, and administrative expenses. Other charter services include leased tanker support for forward deployed units, deep submergence support and lease the lease of commercial tugs.

Nuclear Material funding provides reimbursement to U.S. Department of Energy (DOE) for consumed nuclear material and cost of reprocessing expended nuclear cores.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout.

	FY 1987			FY 1988			FY 1989			Change FY 88/89
		Budget Request	FY 1987	Approp.	Current		Initial Estimate	Change	Amended Estimate	
					Estimate					
Fuel	707,116	490,483		539,559	587,905		551,635	41,458	593,093	5,188
Utilities	190,819	183,555		183,247	179,012		191,987	-8,953	183,034	4,022
Repair Parts	492,631	493,518		490,907	483,245		502,425	-84,764	417,661	-65,584
Other OPTAR	300,241	268,114		265,052	274,222		274,000	-28,185	245,815	-28,407
MSC Charter	303,931	293,402		293,402	300,246		302,124	42,476	344,600	44,354
Nuclear	47,577	54,370		54,370	54,370		49,297	-0-	49,297	-5,073
Total Act. Group	2,042,315	1,783,442		1,826,537	1,879,000		1,871,468	-37,968	1,833,500	-45,500

Activity Group: General Purpose Ship Operations (cont'd)

B. Reconciliation of Increases and Decreases.

	<u>Amount</u>
1. FY 1988 Current Estimate	1,879,000
2. Pricing Adjustments	-26,376
A. Stock Fund	
(1) Non-Fuel	(-62,625)
B. Industrial Fund Rates	-62,625
C. Other Purchases and Contracts	(30,260)
	(5,989)
3. Program Increases	78,325
A. Annualization of FY 1988 Increases	
1) 10 new ship deliveries and reactivation of one CV and two fleet tugs for which a full ship year of support is required in FY 1989.	(28,685)
28,685	
B. Other Program Growth in FY 1989.	
1) Phased delivery of 15 new construction ships and one recommissioned battle-ship.	(49,640)
30,360	
2) Phased delivery of 2 TAOs and resulting increase of 651 MSC ship charter days.	18,162
3) Increase in charter support for non-per diem tugs.	770
4) TAO 187 predelivery costs for cadre of essential crew personnel prior to delivery, crew training, and technical manual support.	348
4. Program Decreases	-97,449
A. Annualization of FY 1988 Decreases	
1) Phased retirement of 13 ships (1 CV for SLEP, 4 SSNs, 6 FF's, and 2 FFG's.)	(-48,460)
-35,319	
2) Transfer of six ship's to the Naval Reserve (4 FFGs, 1 FF, and 1 MCM).	-13,141
B. One-Time FY 1988 Decreases	
1) Reduction of one extra (leap-year) MSC 1-2-19	(-710)
	-710

Activity Group: General Purpose Ship Operations (cont'd)

charter day.
 C. Other Program Decreases in FY 1989 (-48,279)
 1) Phased retirement of 8 ships in -13,916
 FY 1989 (4 FFGs, 4 FPs, and 2 SSN's.) -996
 2) Transfer of 2 MCMS to the Naval Reserve force. -10,744
 3) Reduced procurement of phased material replacement items (e.g. mooring lines, lifejackets, firehoses, etc.). -13,538
 4) Reduction of component and repair parts stock replenishments. -7,085
 5) Two fewer nuclear cores to be cut up and reprocessed. -2,000
 6) Decrease in non-industrial fund utilities.

5. FY 1989 Amended Budget
 Request 1,833,500

III. Performance Criteria.

	FY 1987	FY 1988	FY 1989
Ship Inventory	466	458	460
Ship Years Supported	459.3	465.6	456.6
Conventional	353.0	358.0	347.6
Nuclear	106.3	107.6	109.0
Barrels of Fossil Fuel Required (000)	22,448	21,535	21,725
Underway Steaming Hours	1,055,479	1,064,965	1,066,771
Conventional	801,565	805,839	800,728
Nuclear	253,914	259,126	266,043
Maintenance Manhours Required (000)	64,728	63,860	65,548
	1-2-20		

Activity Group. General Purpose Operations (cont'd)

Maintenance Manhours Funded (\$000)	48,704	50,131	52,358
Nuclear Cores returned to be reprocessed/cost (\$M)	11/19.3	11/44.9	9/39.8
Nuclear Material Consumption	8,310	9,371	9,512
Submarines (\$000)	6,458	5,424	6,057
Surface Ships (\$000)	1,852	3,947	3,453
Per Diem Days Chartered:			
Active Fleet Support	8,960	9,912	10,552
Conversion/Overhaul	0	0	0
Deep Submergence Support (Charter Unit)/(\$000)	2/6,397	2/7,553	2/4,297
Tanker Support for CVBG's (Charter Support) (\$000)	3,060	5,072	3,927
Amphibious/Console Support (Charter) (\$000)	4,17	708	732
Ready Reserve Ship (MSNAP) (Charter) (\$000)	455	0	0

1./ FY 1988 figures for ship years include 6.0 ship years for Naval Reserve ships that have been assigned to steam in support of active force operations in the Persian Gulf.

2./ FY 1988 figures for steaming hours include 7,064 hours steamed by Naval Reserve ships in support of active force operations in the Persian Gulf.

Activity Group: General Purpose Ship Operations (cont'd)

IV. Personnel Summary.

End Strength	FY 1987	FY 1988	FY 1989
A. Military E/S	192,314	201,708	204,111
Officer	12,024	11,588	11,667
Enlisted	180,290	190,120	192,444
B. Civilian E/S	0	0	0

Department of the Navy
Operation and Maintenance, Navy

Activity Group: Ship Maintenance and Modernization
Budget Activity: II General Purpose Forces

I. Description of Operations Financed.

This program funds depot and intermediate level maintenance and modernization, initial outfitting and associated support for the General Purpose Forces as follows:

Regular Overhaul is that maintenance performed by the shipyards on material requiring major overhaul, or complete rebuilding of parts, assemblies, subassemblies and end items and correction of all discrepancies found during pre-overhaul tests and inspections or developed from maintenance history analysis. The repairs restore the ship, including all operating subsystems which affect safety or current combat capability, to established performance standards.

Restricted and Technical Availabilities (RA/TA). A restricted availability (RAV) is for the accomplishment of specific items of work by a repair activity, normally with the ship present, during which period the ship is rendered incapable of fully performing its assigned mission and tasks due to the nature of the repair work. A technical availability (TAV) is for the accomplishment of specific items of work by a repair activity, normally without the ship present, during which period the ship's ability to fully perform its assigned mission and tasks is not affected by the nature of the repair work. RA/TA repairs include voyage repairs, selected restricted availabilities, phased maintenance availabilities, service craft overhauls, repairs during post shakedown of new units, interim drydockings, battery renewals and various other miscellaneous type repairs.

Fleet Modernization Program: For General Purpose Forces, the program is designed to upgrade ships of the fleet to be mission capable in countering current and projected threats, improve capabilities, and comply with imposed requirements. Installation of improvements are programmed to coincide with equipment deliveries and ship availabilities. Funding includes cost of preliminary design, preparation of blueprints, installation of equipment and updating of ships records to reflect the installation. Alterations are authorized for a ship or ship type after it has been demonstrated that there is a need for the improvement and that the particular installation will accomplish that improvement.

The FY 1989 program continues an emphasis on accomplishing alterations during non-overhaul availabilities. In addition, the program continues to emphasize work being done outside of established availabilities utilizing tiger teams, as can be seen by the growth in the separate funding category of the budget.

Activity Group: Ship Maintenance and Modernization (cont'd)

Initial Outfitting. The general purpose forces outfitting account provides non-aviation and follow-on outfitting support for active ships, Navy owned equipment installed aboard Coast Guard ships, and other selected or unique outfitting programs as required. Support is provided for outfitting and allowance changes resulting from installation of new equipment, modification of equipment, special allowance programs, revision of allowance parts lists and allowance equipment lists, modification of allowance computation rules, and other approved allowance changes. The FY 1989 program finances outfitting changes required as a result of the continuing modernization effort as well as changes resulting from the desire for more reliable combat ready equipment.

Berthing and Messing provides for operation and maintenance of 98 mobile berthing and messing facilities. Requirements for the craft are based on the need to accommodate shipboard personnel assigned to ships undergoing repair and alteration when ships are made uninhabitable due to shipwork. Any requirements which can not be met by use of the craft are fulfilled by the lease of berthing and messing facilities from commercial sources or government quarters. In addition, funding in this program finances overhaul, repair, and drydocking of afloat berthing and messing service craft.

Intermediate Level Maintenance is that fleet maintenance which is normally performed by Navy personnel on tenders, repair ships, aircraft carriers, and shore intermediate maintenance activities (SIMAs). The IMAs use either their specialized equipment and specialized skills to perform maintenance actions aboard a customer ship or use their own organic shop facilities to repair and maintain equipment on a ship-to-shop basis. IMAs are assigned to repair and test weight handling equipment, repair small boats, repair service craft, and overhaul small boat engines. IMA boiler repair capability includes manufacturing casting sections, bending and installing tubes, and installing refractory. All afloat IMAs are assigned divers who scrub sea growth from ships and perform repairs to the external underwater hull, propellers, and rudders. IMAs also provide such services as printing, photography, optical repairs, engraving, canvas work, strainer shield manufacture, and certain IMA designated preventive maintenance actions.

Inactivation of Ships provides for the inactivation and disposal of nuclear submarines and surface vessels according to established schedules. The program also supports temporary lay-up of submarines and surface ships. Costs of submarine inactivations include de-fueling, blanking of sea connections, removing hazardous materials and fluids, removing equipment and repair parts of immediate value to operating forces, and placing the ship in a safe condition until the final disposal method is determined.

Maintenance Improvement Support includes:

Surface Ship Maintenance and Performance Monitoring System which supports placing and maintaining various designated surface ship classes on engineered maintenance strategies, and for devising and implementing engineering, technical, and logistic support approaches to extend the ship operating cycle under these maintenance strategies to the maximum extent practical without degrading material readiness of the fleet. These maintenance strategies result in fewer ship overhauls or the elimination of ship

Activity Group: Ship Maintenance and Modernization (cont'd)

overhauls in some cases.

Surface Ship Engineered Operating Cycles which develop expanded depot capability for repair and overhaul of electronic equipment and modules installed on ships.

Intermediate Maintenance Activity Upgrade program which provides required general engineering and analysis, modern industrial plant equipment, and collateral equipment necessary to ensure the installation of equipment.

Submarine Ship System Performance Monitoring and Support (SSSPMS) provides engineering/technical management and logistics support for nuclear attack submarines which have extended operational intervals between major overhaul.

Acoustic Trials of submarines following an overhaul or depot modernization period and at the midpoint of each ship's operating cycle. These trials provide the basic data from which the noise baseline characteristics of each ship may be obtained. In addition, noise related problems are identified and corrective action is taken.

II. Financial Summary (Dollars in Thousands)

A. Sub-Activity Group Breakout

	FY 1988			FY 1989			Change FY 88/89 <u>-545,679</u>	
	FY 1987 <u>1,525,166</u>	Budget Request	Approp	Current Estimate	Initial Estimate	Change		Amended Estimate
		<u>1,247,107</u>	<u>1,247,107</u>	<u>1,247,107</u>	<u>1,271,755</u>	<u>637,854</u>		<u>+88,222</u>
Ship Overhauls								
Restr./Tech.								
Avail	1,427,535	1,333,766	1,289,838	1,409,656	1,816,102	+136,937	+543,383	
Intermediate								
Maint.	279,676	240,544	239,189	237,889	249,386	-17,159	-5,662	
Fleet Modern.								
Program	1,266,450	1,254,603	1,122,325	1,000,779	1,560,837	-515,795	+44,263	
Outfitting	266,786	326,647	328,122	297,500	394,996	-75,589	+21,907	
Berthing/Messing	48,959	34,216	32,048	32,030	41,952	-2,106	+7,816	
Submarine EOC	37,680	35,136	30,591	30,461	35,670	-4,797	+412	
Inactivation of								
ships	19,929	86,782	64,720	46,720	129,769	-39,128	+43,921	
Maint. Improve								
Supt	60,526	80,113	70,822	70,298	79,015	-10,712	-1,995	
Total	* 4,932,707	4,638,914	4,424,762	4,397,088	4,945,581	-421,127	+108,366	

* Does not include \$369.7 million unobligated on 30 September 1987 but required by government estimate for completion of private repair contracts executed under Technical Operating Budget (TOB) procedures and for changes in scope of ship overhaul, maintenance, and repair for work inducted in FY 1987 in

Activity Group: Ship Maintenance and Modernization (cont'd)

accordance with authority in 10 U.S.C. 114.

B. Reconciliation of Increases and Decreases

1. FY 1988 Current Estimate		4,397,088
2. Pricing Adjustments		12,746
A. Annualization of Direct Pay Raises	(1,331)	
1) Classified	804	
2) Wage Board	527	
B. Direct Pay Raises	(1,594)	
1) Classified	978	
2) Wage Board	616	
C. Foreign National Direct Hire	(5,710)	
D. Stock Fund	(-49,151)	
1) Non-Fuel	-49,151	
E. Industrial Fund Rates	(-3,544)	
F. Other Pricing Adjustments	(56,896)	
1) Other Purchases	56,806	
3. Functional Program Transfers		4,503
A. Transfers In	(4,503)	
1) Intra-Appropriation		
a) Transfer of the FMP Management Information System from Budget Activity 7.	4,503	
4. Program Increases		829,485
A. Other Program Growth in FY 1989		
1) Overhaul Schedule Changes	(81,933)	
a) Support Ships (ARL, ATS)	+2 24,476	
b) Tenders (AD)	+3 36,443	
c) Destroyers (DDG)	+1 15,950	
d) Mine Sweepers (MSO)	+3 5,064	
2) RA/TA Schedule Changes	(572,077)	
a) SRA Schedule Mix	293,761	
b) PMA Schedule Mix	34,688	
c) Increase of 5 Depot Modernization Periods for SSN-688 Class.	175,402	
d) Increased complexity of Submarine Battery Renewals.	1,339	

Activity Group: Ship Maintenance and Modernization (cont'd)

e) Dry Dock overhaul of AFDM-6.	25,174	
f) Increase in Emergent Repairs due to a change in the mix of ships.	13,083	
g) Increase in Other Planned RA/TA. primarily for USS CORAL SEA.	28,630	
3) Fleet Modernization Program	(77,058)	
a) Increase for 5 Special Hull Treatment installations during SSN-688 DMPs.	44,919	
b) One additional DDG-993 class New Threat Upgrade package.	32,139	
4) Increase for new start equipments for outfitting major equipment spares and other equipment.	(39,516)	
5) Increase in berthing and messing for 1,497 additional crewmen and 6 more ships requiring service.	(6,810)	
6) Two additional submarines scheduled for inactivation in FY 1989.	(38,367)	
7) Intermediate maintenance contracted for many years increase by 139 due to an increase in workload.	(13,724)	
		-738,368
4. Program Decreases		
A. Other Program Decreases in FY 1989		
1) Overhaul Schedule Changes		
a) Aircraft Carrier (CV)	-1	(-713,901)
b) Submarines (SSN)	-4	-116,922
c) Cruisers (CG/CGN)	-2	-342,733
d) Frigates	-2	-139,011
e) Amphibious Ships (LPH/LSD)	-2	-36,662
f) Support Ships (ASR/AS)	-2	-45,800
2) Decrease of one Interim Drydocking	-2	-30,573
3) Fleet Modernization Program		(-2,200)
a) Decrease in Ordnance Alterations		(-8,967)
b) Decrease in Elevator Upgrades		-7,284
4) Decreased Outfitting requirements for systems completed.		-1,683
5) Four fever Acoustic Trials in FY 1989		(-12,948)
		(-532)

Activity Group: Ship Maintenance and Modernization (cont'd)

5. FY 1989 Amended Budget Request

4,505,454

III. Performance Criteria

A. Ship Overhauls: The following table depicts the regular overhaul program profile for fiscal years 1987, 1988, and 1989. Although the overhaul is costed for the full term including advance preparation, only the portion applicable to the fiscal year appropriation appears with the ship in the induction year. Advance preparation costs are reflected in the appropriate O&MN expense fiscal year.

Ship Type	FY 1987		FY 1988		FY 1989	
	# Ships	\$M	# Ships	\$M	# Ships	\$M
Carriers	1	121.4	1	117.0	0	0
Submarines (Nuclear)	11	995.7	8	771.0	4	433.8
Cruiser/Destroyer/ Frigate	15	323.8	14	371.4	11	236.1
Amphibious	4	146.9	2	45.8	0	0.0
Auxiliary/Support	5	81.1	2	29.7	8	67.4
Total Inductions	36	1,668.9	27	1,334.9	23	737.3
Advance Funding		68.0		63.3		106.9
AERP/PERA *		29.6		14.3		22.9
Maintenance Carry Forward		-241.3		-140.7		-141.0
Total Program		1,525.2		1,271.8		726.1

*Advance Equipment Repair Program/ Planning, Engineering Repair and Alteration represents preoverhaul effort/repairs accomplished outside the shipyard facilities and directly funded by the customer.

B. Restricted and Technical Availability. The resources required for voyage repairs are based on historical experience for each ship type and number of ships. Resources for planned availabilities are based on the number of scheduled availabilities in each category. A summary of voyage repairs and planned availabilities follows:

Activity Group: Ship Maintenance and Modernization (cont'd)

	FY 1987		FY 1988		FY 1989	
Type of Repair	# Ships	\$M	# Ships	\$M	# Ships	\$M
Voyage (ship yrs)	473.0	338.7	474.6	336.4	475.7	352.3
Battery Renewals	12	4.3	14	6.0	14	7.4
Interim Drydocking	4	1.3	3	5.0	2	2.8
Selected Rest. Avail.*	101	646.0	83	526.7	96	984.6
Phased Maint. Avail.	54	317.8	65	395.0	58	410.3
Service Craft and Boats		26.3		34.7		55.0
Post Shakedown Avail.	4	3.7	11	1.5	11	3.5
Deep Submergence Vessels		10.5		7.6		9.9
Habitability		26.5		26.3		26.9
Miscellaneous RAVs		95.8		70.5		100.3
Maintenance Carry Forward		-43.4				
Total	**	1,427.5		1,409.7		1,953.0

*Includes Submarine Depot Modernization Periods, which commence in FY 1989.

C. Fleet Modernization Program

FY 1987	IMPOSED	MISSION	C3	HM&E & NAV & PERS	PROGRAM TOTAL				
CARRIERS	REQMTS	8.6	59.6	20.7	28.0	24.1	10.0	53.8	204.8
SUBMARINES	0.0	109.2	13.2	106.5	12.3	0.0	38.7	279.9	
SUB SUPPORT SHIPS	0.0	9.3	0.0	0.0	0.0	0.0	0.9	10.2	
CRUDES-NINE WARFARE	1.1	210.5	30.9	54.5	34.4	24.7	88.8	444.9	
SERVICE SHIPS	1.8	21.9	9.3	2.5	7.8	2.0	15.0	60.3	
AMPHIBIOUS SHIPS	4.8	23.0	19.1	8.2	15.2	1.0	31.2	102.5	
FLOATING DRYDOCKS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
SEPARATE FUNDING	4.5	81.2	6.9	119.5	12.2	0.0	55.4	279.7	
NET ADVANCE PLANNING								-30.7	

Activity Group: Ship Maintenance and Modernization (cont'd)

MAINT. CARRY FORWARD -85.1

TOTAL FOR BA-2 20.8 514.7 100.1 319.2 106.0 37.7 283.8 1,266.5

FY 1988	IMPOSED REQMTS.	MISSION	C3	SAFE		HAB PROGRAM TOTAL	
				HM&E	& NAV & PERS SUPPORT	\$	\$
CARRIERS	1.7	56.0	8.9	39.7	10.6	3.3	47.2 167.4
SUBMARINES	0.0	51.7	1.6	70.5	1.6	0.0	43.5 168.9
SUB SUPPORT SHIPS	0.0	0.9	0.0	1.0	0.0	0.0	0.2 2.1
CRUDES-MINE WARFARE	5.4	144.5	13.1	34.6	12.7	10.7	74.3 295.3
SERVICE SHIPS	0.0	22.0	7.1	5.2	17.6	8.6	20.1 80.6
AMPHIBIOUS SHIPS	2.6	10.8	8.5	2.1	16.6	0.7	12.4 53.7
FLOATING DRYDOCKS	0.0	0.0	0.0	0.0	0.0	0.0	0.0 0.0
SEPARATE FUNDING	0.0	166.0	18.5	17.9	0.3	0.7	8.5 111.9
NET ADVANCE PLANNING							+20.9
TOTAL FOR BA -2	9.7	451.9	57.7	171.0	59.4	24.0	206.2 1,000.8

FY 1989	IMPOSED REQMTS.	MISSION	C3	SAFE		HAB PROGRAM TOTAL	
				HM&E	& NAV & PERS SUPPORT	\$	\$
CARRIERS	0.0	27.7	15.3	10.4	8.2	8.8	47.1 117.5
SUBMARINES	0.6	47.0	4.9	113.4	2.8	0.0	42.9 211.6
SUB SUPPORT SHIPS	0.0	0.6	0.0	0.3	1.7	0.0	1.4 4.0
CRUDES-MINE WARFARE	9.8	163.6	12.5	36.9	15.3	5.2	81.9 325.2
SERVICE SHIPS	0.6	26.7	5.8	7.2	18.5	0.6	13.6 73.0
AMPHIBIOUS SHIPS	2.5	27.0	5.6	5.3	16.3	0.2	17.2 74.1
				1-2-30			

Activity Group: Ship Maintenance and Modernization (cont'd)

FLOATING DRYDOCKS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SEPARATE FUNDING	0.0	175.7	12.3	26.8	10.9	0.5	9.7	235.9	
NET ADVANCE PLANNING								+3.7	
TOTAL FOR BA - 2	13.5	468.3	56.4	200.3	73.7	15.3	213.8	1,045.0	

D. Outfitting (\$000)

	<u>FY 1987</u>	<u>FY 1988</u>	<u>FY 1989</u>
1. Major Equipment Spares	133,355	134,995	170,095
2. COSAL Update Costs	47,361	37,648	63,064
3. Special Programs	13,041	19,483	16,738
4. Equipage Programs	53,019	74,245	35,065
5. Between Overhaul Changes	12,100	22,502	25,858
Subtotal	258,876	288,873	310,820
6. Integrated Logistics Overhaul	7,910	8,627	8,587
Total	266,786	297,500	319,407

E. Berthing and Messing

Total # of crewmen requiring
berthing and messing

<u>FY 1987</u>	<u>FY 1988</u>	<u>FY 1989</u>
43,651	37,418	38,915

Total # of ships supported

127	139	145
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F. Intermediate Maintenance provides for repair parts and materials for intermediate level support of the active forces including self-support for the tenders. The cost associated with the intermediate maintenance effort is identified to productive manhours in the repair departments and a cost per material year. The commercial industrial (CIS) program identifies the workyears of effort purchased and the total cost.

Repair Department Support

Productive Manyears

Total material costs (\$000)

Contract Support

<u>FY 1987</u>	<u>FY 1988</u>	<u>FY 1989</u>
8,514	8,575	8,772
206,561	196,508	176,328
1-2-31		

Activity Group: Ship Maintenance and Modernization (cont'd)

Manyyears	533	153	292
Total Costs (\$000)	45,528	13,084	27,331
SIMA Admin costs (\$000)	27,587	28,320	28,568

G. Inactivation of Ships (\$000)

Submarine Inactivations
 (# of Advance Plan Efforts)
 (# of Inactivations)
 (# of Reactor Disposals)

	FY 1987	FY 1988	FY 1989
	5,100	46,720	85,041
	(1)	(4)	(4)
	-	(2)	(4)
	-	(1)	(0)

H. Maintenance Improvement Support

SSN Performance Monitoring and Support Program permits placing submarines on an extended operating cycle without endangering safety of operations. The measure of achievement is the number of ships supported and the ability to place additional ships on the program as they fit the criteria.

	FY 1987	FY 1988	FY 1989
--	---------	---------	---------

Engineering Technical and
 Management Support *

	875	892	976
--	-----	-----	-----

Maintenance Planning *

	875	892	976
--	-----	-----	-----

Ship Subsystem Performance Data
 and Performance Assessment **

	709	721	730
--	-----	-----	-----

174 Month SEOC planning (\$000)

	2,334	10,463	6,759
--	-------	--------	-------

* Workload indicators are ship operating months supported.
 ** Workload indicators are SSN SEOC operating months supported.

Surface Ship Maintenance and Performance Monitoring System (SMPMS). This program supports placing and maintaining various designated surface ship classed on engineered maintenance strategies, and devising and implementing engineering, technical, and logistical support approaches to extend the ship operating cycle under these maintenance strategies to the maximum extent practical without degrading material readiness. These maintenance strategies result in fewer overhauls or the elimination of overhauls and an increase in ship operational time. The three maintenance strategies are Engineered Operating Cycle (extended regular overhaul intervals with

Activity Group: Ship Maintenance and Modernization (cont'd)

condition-directed maintenance), the Phased Maintenance Program (elimination of regular overhaul with condition-directed maintenance and use of Port Engineers), and LO-MIX progressive overhaul (elimination of regular overhaul with time-directed maintenance).

	FY 1987	FY 1988	FY 1989
Maintenance Improvement Prog. (ship classes)	4	7	8
Sys/Equip. Maint. Monitoring (ship classes)	4	4	4
Engineered Operating Cycle (ship classes)	12	12	12
ASMS/PSKS/Phased Maint. Program (ship classes)	21	23	25
LO-MIX Progressive Overhaul (# of ships)	54	56	57

IV. Personnel Summary

A. Military E/S
Officer
Enlisted

FY 1987	FY 1988	FY 1989
8,906	8,718	8,890
220	226	224
8,686	8,492	8,666

B. Civilian E/S
USOH
FNDH

FY 1987	FY 1988	FY 1989
352	446	461
280	360	375
72	86	86

Department of the Navy
Operation & Maintenance, Navy
Exhibit OP-5

Activity Group: Combat Support Forces
Budget Activity: II - General Purpose Forces

I. Description of Operations Financed.

The operations of Navy Mobile Construction Battalions (NMCB's) and Special Combat Support Forces, together with repair of combatant craft, are financed in this program.

NMCB's - Funding requested provides for training, operational support, and camp maintenance for nine construction battalions, two construction regiments, two underwater construction teams, two fleet battalion commanders, and two civic action teams. Travel is necessary to carry out NMCE deployment schedules and construction taskings and is usually arranged via Military Air Command (MAC) special aircraft charter.

Special Combat Support - Funding requested provides for trained special combat forces to deploy either aboard ship or to a forward base to conduct special or unconventional warfare operations. Component commands that are funded under this program include Underwater Demolition Teams, Explosive Ordnance Disposal Groups, an airborne mine countermeasures squadron, the Naval Beach Group component commands (Beach Master Unit, Mobile Technical Unit, Amphibious Construction Battalion, Assault Craft Unit, and Naval Cargo Handling Battalion), and Landing Craft Air Cushion (LCAC) units. These units provide a wide range of highly important and specialized capabilities. Among other items, expenses include civilian personnel salaries, repair parts, equipment, fuel, contract services, facilities maintenance, and ADP support. Navy Seal Teams are no longer funded under this program. Beginning in FY 1988, funding for Navy Seal Teams has been transferred from Budget Activity 2 to Budget Activity 11. Resource reductions that are associated with this transfer of the Seal Teams to Budget Activity 11 are reflected in the financial summary.

Craft Repair - Funds requested finance repairs to combatant craft consisting of various landing, mine countermeasures, and other special purpose craft. Repairs include organizational, intermediate, and depot level maintenance. As a general policy, craft maintenance is performed at the lowest level of maintenance practical in order to provide maximum availability of craft.

Activity Group: Combat Support Forces (cont'd)

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout.

	FY 1987		FY 1988		FY 1989		Change FY 88/89
	FY 1987	Budget Request	Approp.	Current Estimate	Initial Estimate	Amended Estimate	
Const. Battalions	40,505	41,147	40,373	35,792	41,254	36,153	799
Spec. Com Support	85,539	35,752	46,901	52,068	40,884	46,499	-5,569
Combatant Craft Repair	10,497	9,998	9,998	10,129	11,519	11,648	1,519
Total, Act. Group	136,541	86,897	97,272	97,989	93,657	94,300	-3,689

B. Reconciliation of Increases and Decreases.

	Amount
1. FY 1988 Current Estimate	\$97,989
2. Pricing Adjustments	-1,036
A. Annualization of FY 1988 Direct Pay Raise	(32)
(1) Classified	28
(2) Wage Board	4
B. FY 1989 Direct Pay Raise	(75)
(1) Classified	71
(2) Wage Board	3
(3) Foreign National Direct	1
C. Stock Fund	(-2,914)
(1) Non-Fuel	-2,914
D. Industrial Fund Rates	(655)
E. FN Direct	(8)
F. Other Purchases	(1,108)
3. Program Increases	4,609
A. One-Time FY 1988 Increases	(60)
(1) One-time cost for the expansion of the	60
1-2-35	

Activity Group: Combat Support Forces (cont'd)

the Naval Mobile Construction Battalion Detachment at Sigonella, Italy, which is scheduled to become the fifth main deployment campsite vice a detachment.

(4,549)

B. Other Program Growth in FY 1989.

620

(1) Increase for the the maintenance and upkeep

of tools, equipment, consumables and supplies required for daily operations and unit deployment training exercises for the Naval Construction Battalions.

256

(2) Increase for maintenance and supplies required to deploy additional remotely piloted vehicles (RPV's) for exercises, training and contingency deployments.

1,144

(3) Increase in the service and combatant craft overhaul and maintenance programs based on their cyclic maintenance and overhaul requirements.

2,529

(4) Increase in LCAC operations resulting from additional craft deliveries and operating hours. Also supports an increase in operating, supply and administrative expenses associated with the expansion of Explosive Ordnance Disposal Group One from 3 to 4 Mobile Units and from 61 to 63 detachments.

-7,262

4. Program Decreases

(-4,771)

A. One-Time FY 1988 Costs

-24

(1) Reduction of two Civilian personnel workdays.

-4,747

(2) One time reduction of non-recurring operating costs for Persian Gulf combat support forces.

(-2,491)

3. Other Program Decreases in FY 1989

-193

(1) Reduction in spares support for AOS-14 minesweeping gear.

-331

(2) Reduction in contractor support for anti-terrorist awareness training.
1-2-36

Activity Group: Combat Support Forces (cont'd)

- (3) Reduction to repair and maintenance of mock training ship used by Navy Cargo Handling Group (NAVCHARGRU). -775
- (4) Reduction in operational support requirements due to fewer scheduled NMCS deployments in FY 1989 than in FY 1988. -643
- (5) General reduction in supplies, material, and equipment purchases. -549

\$94,300

5. FY 1989 Amended Estimate

III. Performance Criteria.

A. Navai Mobile Construction Battalions

Deployment Sites	FY 1987		FY 1988	
	# of Planes Req.	Total Miles	# of Planes Req.	Total Miles
Okinawa	10	85,907	21	229,264
Guam	4	65,664	14	111,174
Rota	9	65,691	21	147,735
Roosevelt Roads	14	60,128	34	137,949
Subic Bay	13	165,012	-	-
Sigonella	4	28,306	9	105,246
Total	54	470,708	99	482,367

Activity Group: Combat Support Forces (cont'd)

	<u>FY 1989</u>	
Deployment Sites	# of Planes Req.	Total Miles
Okinawa	10	85,907
Guam	21	171,213
Rota	21	159,019
Roosevelt Roads	20	60,865
Subic Bay	2	26,088
Signonella	<u>14</u>	<u>94,965</u>
Total	88	598,057

B. Special Combat Support Force

	<u>FY 1987</u>	<u>FY 1988</u>	<u>FY 1989</u>
Special Combat Support Forces	58	45	46
Service Craft/Boats 1/	459	349	359
Planned Annual Deployments or Exercises of:			
SEAL TEAMS 2/	63		
Explosive Ordnance Disposal	74	77	77

1/ NAVSEA issuance/retrieval of craft creates fluctuating inventory from year to year.

2/ Combat craft inventories and deployment data reflect transfer of SEAL Teams from Budget Activity 2 to Budget Activity 11 in FY 1988.

Activity Group: Combat Support Forces (cont'd)

Combat Craft Repair Overhauls
Purchased Equipment Maint Sched:

(1) ROH (\$/# of Overhauls)

Craft Type	1987	1988	1989
PB Patrol Boat	156 (1)		
LCU Landing Craft Utility	3,473 (5)	2,478 (3)	3,658 (6)
MSB Minesweeping Boat	3,256 (2)	1,547 (2)	891 (1)
YRST Yard Repair Salvage Tender	127 (1)	609 (1)	
YSD Yard Salvage Derrick		544 (1)	220 (1)
LCM Land Craft Mechanized	1,351 (7)	2,691 (8)	3,650 (9)
LCM/WB Land Cft Mechanized/Wkboats	910 (6)	2,040 (9)	1,540 (11)
SWCL Special Warfare Craft Light	342 (4)		
UB Utility Boat		29 (1)	
VB Work Boat			470 (2)
PE Personnel Boat		191 (1)	175 (1)
PE Personnel Boat			
SLWT Side Loadable Warping Tug			375 (1)
(2) RATA	882		759
GRAND TOTAL	10,497	10,129	11,648

IV. Personnel Summary

	FY 1987	FY 1988	FY 1989
A. Military E/S	12,715	10,857	11,019
Officer	11,789	10,112	10,264
Enlisted	926	745	755
B. Civilian E/S	194	199	199
USDH	187	192	192
FNDH	3	3	3
FNIH	4	4	4
		1-2-39	

Department of the Navy
Operation & Maintenance, Navy
Exhibit OP-5

Activity Group: Fleet Operations Support
Budget Activity: II - General Purpose Forces

I. Description of Operations Financed.

The funds requested support the following functions in support of fleet operations:

- a. Fleet Temporary Additional Duty (TAD) - Includes centrally managed travel required for operational training, administrative travel for ship to shore assignments and hospitalization or other emergencies.
- b. Combat Systems Readiness - Includes expenses for personnel based at selected Naval Security Group sites to install, maintain and operate special cryptologic equipment aboard selected combatants. Funds also provide for testing weapon systems operations and readiness at the Atlantic Underwater Test and Evaluation Center, and various Pacific fleet ranges.
- c. Undersea Surveillance - Includes expenses for performing oceanographic observations in selected areas in order to provide the U.S. Navy with more extensive information on oceanographic conditions and for training of personnel employed in observing and analyzing oceanographic conditions. Raw data is collected by naval facilities and then coordinated, analyzed, and evaluated by the Oceanographic Systems Commanders and certain NAVFACs prior to dissemination to fleet users and compilation for statistical studies. This supports the Navy anti-submarine warfare (ASW) capability by contributing to detection of potential enemy submarine movements through the use of acoustic sensor systems. Operating expenses include civilian personnel, contractual services for repair, data processing, training, supplies, and operation of T-AGOS ships.
- d. Anti-Submarine Warfare Operations Centers (ASVOC) - Includes expenses for fifteen operational ASVOC installations located world wide in support of fleet operations, two abbreviated systems, located at North Island and Cecil Field (in support of the S-3A), a training site at Dam Neck, and a prototype/maintenance support site at St Indigoes. These commands meet the tactical support requirements of the P-3C long range air ASW weapon system and provide terminals for the ASW area commanders in the overall Navy Command and Control System. Funds requested finance operational maintenance; installation and checkout of hardware change kits; integrated logistics support; life cycle support of operational and system test software to respectively control mission aspects and detect and isolate system malfunctions; implementation of system software reliability and maintainability improvements; and software modifications to maintain compatibility with airborne systems changes and other systems.

Activity Group: Fleet Operations Support (cont'd)

e. Ship Operations EW Support - Includes various equipments, devices, subsystems, and systems which will provide the capability to degrade the effectiveness of enemy weapons by performing countermeasure functions against his command, control and communications and weapons targeting systems. In addition, systems included in this program provide the capability to maintain the integrity of USN command, control, and communications networks and targeting systems.

f. Fleet Electronic Command and Control Systems - Includes expenses for hardware and software maintenance; within-envelope conversions of software; site surveys and preparation, installation and check-out of hardware and software; technical support services; and documentation for Navy Command and Control Systems (NCCS), the Ocean Surveillance Information System, Navy VHMCS Software Standardization, Tactical Flag Command Centers, and Over-the-Horizon Targeting. Funding also provides for the replacement of shipboard VERDIN VLF receivers with the Compact VLF; software and technical support services for LINK II in support of Command, Control and Communication mission requirements; and, installation, engineering and technical services for hardware and software, refurbishment of equipment, and life-cycle support for Special Electronic Warfare and Command, Control and Communications Countermeasures.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout.

	FY 1987	FY 1988		FY 1989			Change FY 88/89	
		Budget Request	Approp	Current Estimate	Initial Estimate	Change		Amended Estimate
COMBAT SYSTEMS READINESS	15,627	20,392	19,522	19,524	21,440	-1,585	19,855	331
TAD	40,699	35,372	34,692	36,687	36,060	-1,729	34,331	-2,356
ASWOC OPERATIONS	10,053	17,042	16,425	16,012	14,478	-1,115	13,363	-2,649
UNDERSEA SURVEILLANCE	47,040	53,987	53,872	45,257	63,989	180,748	244,737	199,480
FLEET ELECTRONIC COMMAND	53,407	72,905	65,659	63,237	82,616	-17,064	65,552	2,315
SHIP OPS EW SUPPORT	6,459	9,492	9,057	8,067	11,164	-5,257	5,907	-2,160
TOTAL ACTIVITY GROUP	173,285	209,190	199,227	188,784	229,747	153,998	383,745	194,961

Activity Group: Fleet Operations Support (cont'd)

B. Reconciliation of Increases and Decreases.

	<u>Amount</u>
1. FY 1988 Current Estimate	\$188,784
2. Pricing Adjustments	
A. Annualization of FY 1988 Pay Raise	15,269
1) Classified	(17)
B. FY 1989 Direct Pay Raise	17
1) Classified	(56)
C. Stock Fund	56
1) Non-Fuel	(-580)
D. Industrial Fund Rates	-58C
E. Health Benefits	(11,891)
F. Annualization of PERS	(2)
G. Other Pricing Adjustments	(1)
1) Other Purchases	(3,882)
	3,882
3. Functional Program Transfer	
A. Transfers-In	175,524
1) Intra-Appropriation	(175,524)
a) Space Systems Product Management, ROTH	81
system for the Fleet Surveillance Support	
Command from BA 1.	
b) SOSUS/SURTASS Program transfer from BA 7	175,443
Space and Naval Warfare Systems Command.	
4. Program Increases	
A. Annualization of FY 1988 Increases	34,036
1) Annualization of required deployments for	(5,480)
rotation of personnel at ROTH Site #1	713
(Amchitka). Includes funding for MAC-SAM	
travel and per diem.	
2) Increase for full year operations at	4,767
ROTH Site #1. Includes supplies and	
contractor support of ROTH transmitter	
and receiver operations.	
B. One-Time FY 1989 Costs	(983)
1) One time funding for ADP support unique	593
to implementation of the Space Information	
Management System (SIMS) data base at ROTH	
sites. This includes developmental costs for	

Activity Group: Fleet Operations Support (cont'd)

data base architecture as well as systems analysis and development of applications software to be used at Fleet Surveillance Support Command (FSSC) and all other ROTHER sites.	390
2) One time FY 1989 costs for furniture and equipment for MILCON P-921, ROTHER Site #1 (Amchitka).	
C. Other Program Growth in FY 1989	(27,573)
1) Spare parts and increased maintenance for Fast Time Analyzer System.	145
2) Additional In-Service Engineering Agent (ISEA) support for the Chaff Buoys and Inflatable Decoys Systems.	258
3) Essential Training and Operational Travel.	367
4) Stock Fund supplies/materials and contract support required for oceanographic data collection efforts.	451
5) Arctic Environment Data Collection Project.	14
6) Cryptologic Training Support Office support for the Cryptologic Field Trainer (CFT). The CFT will provide direct support operators with simulated live signal environment through which they can tune for "live environment" training. Funding will provide for development and maintenance of necessary scenarios or courseware.	450
7) Increase of two Susceptibility Vulnerability Assessments (SSVA).	265
8) Increase for completion of on-site surveys to evaluate potential locations for ROTHER production model transmitters, receivers and Operations Control Centers (scheduled for delivery or installation in FY 1991-1992). Includes funding for travel and technical expertise from other government agencies.	211
9) Increase for full mission communications support at ROTHER Site #1 (Amchitka).	105
10) Increase for training of ROTHER personnel. Includes funding for course update and development, training devices, contractor training services and training equipment repair.	514
11) Increased travel and other operational costs at	182

Activity Group: Fleet Operations Support (cont'd)

Fleet Surveillance Support Command due to initial management operations of overseas detachments and increased student loading.	2,341
12) ROTH - Increase provides software support at fully operational level (736); perform preliminary surveys of additional Pacific and Atlantic sites and conduct environmental impact assessments and environmental restrictions, which include site survey, quick look survey and design reviews (127); establish on-site support to install, maintain, and manage training equipment (478); transportation costs to deploy an operational system (93); surface trucks (158); collateral equipment (115); and air transportation (636).	
13) Navy Command and Control Systems (NCCS) Ashore Ocean Surveillance Information System (OSIS) -Increase reflects costs of technical services associated with computer software (712) and ILS documentation (2,949).	3,661
14) Increase in electronic warfare data extraction and manipulation capabilities for ship operations and electronic warfare support.	313
15) SOSUS - Increase in installation, travel, maintenance, systems engineering and ocean survey efforts (2,684); increase based on projected ship operating days to support surveys (2,651); increase in consumable materials to support Acoustic survey, array installations and repairs (2,109).	7,444
16) SURTASS - Increase for additional 8 ship months of TAGOS operations and associated costs of additional ship technicians, additional manpower at Array Maintenance Facilities, increased depot maintenance, and additional field support.	272
17) OTH-T - Increase to provide interoperability testing and evaluation of system specifications.	90
18) Entitlement for overhaul travel and outpatient per diem for OUTCONUS dependents.	430
19) 20B5 Mobile Combat Systems Trainer - Funds provide travel for instructors and trainer to train operating forces in homeports.	120
20) AN/SQ-89(V)2 Combat Systems Team Trainer -	282

Activity Group: Fleet Operations Support (cont'd)

Funds will provide travel support for shipboard
Combat/General Quarters teams to trainer site.

- 21) Increase for MSC charter of 4 new TAGOS
ships on line in FY 1989.

9,658

-29,568

5. Program Decreases

A. Other Decreases in FY 1989

(-29,868)

- 1) Two less CIVPERS work days in FY 1989

-10

- 2) Reduction in costs for SLOW WALKER

-287

operations due to installation of
Phase III equipment.

- 3) Termination of FY 1988 only funding for

-4,436

Persian Gulf Operations support.

-2

- 4) Reduction in contractor advisory and assis-
tance services resulting from intense manage-
ment review.

-130

- 5) Decreased In-Service Engineering Agent (ISEA)
support provided for the Quick Reaction Capability
(QRC) effort.

-168

- 6) Decreased effort to generate and review
engineering data and system planning supporting
SRC-47 Flight Deck Communication System.

-240

- 7) Decrease in number of MK48 torpedo proficiency
firings.

-692

- 8) Reduction in TAGOS-10 per diem days (-216 days)

-1,579

- 9) Reduction in contractor support services for
replacement of tactical telephone switchboard at
Joint Operation Center, Joint Operational Tactical

-487

- System (JOTS), and Maritime Defense Zone contract.
10) Decreased software engineering support for Joint
Tactical Information Distribution System (JTIDS)

and Command and Control (C2P) processor. Elimination
of all USQ-83 SSA/ISEA efforts.

-4,912

- 11) NCCS Ashore - Reduction in efforts for computer
software maintenance (25 workyears), hardware main-
tenance operational support (7 workyears) and
installation (11 workyears).

-1,448

- 12) NCCS Afloat (TPCC) - Decrease in Depot Level
Maintenance and Software Support Activity(SSA)/
Software Maintenance reflects less contractor
support as government facility begins taking over

1-2-45

Activity Group: Fleet Operations Support (cont'd)

these functions (-489). Reduced documentation and associated technical services as project matures (-505). Reduced costs for installation plans and reduced management support functions from field activities (-454).

13) OTH-T - Decrease reflects loss of two work-years of effort in lead lab support and configuration control. -220

14) Joint Interoperability of Tactical Command and Control Systems (JINTACCS) - Decrease of 2.5 workyears in configuration management of Message Text Formats and Bit oriented messages. -329

15) ASVOC - Reduce or delay FY 1989 requirements to relocate ASVOC/ASCOMH equipment, install upgrades and installation of ASVOC Power Control Systems. -2,983

16) Reduction in level of maintenance and speed of turn around for AN/ULQ-16 system (-1,799) and LMS I & II (-207). Decrease level of software support and maintenance to restore mainframe computer in event of system crash (-781). -2,787

17) ROTHER - Reduction reflects completion of installation of operational system, reduced site surveys, and reduced contractor support. -1,967

18) NCCS Ashore (OSIS) - Decrease in on-site operations support and technical services associated with hardware installation site preparation. -2,189

19) SOSUS - Reduction in the level of support provided to various systems, special projects and operational subsystems. -3,927

20) Reduction in funds available for Maritime Defense Zone surveillance operations to meet budget deficit reduction goals. -921

21) Reduction in Command and Control initiatives to meet budget deficit reduction goals. -154

6. FY 1989 Amended Budget Request

\$383,745

1-2-46

Activity Group: Fleet Operations Support (cont'd)

III. <u>Performance Criteria.</u>	<u>FY 1987</u>	<u>FY 1988</u>	<u>FY 1989</u>
A. <u>Combat System Readiness</u>			
<u>MK-48 Proficiency Firings</u>	496	678	651
B. <u>Temporary Additional Duty</u>			
<u>Per Diem Days</u>	799,995	735,786	712,435
C. <u>ASW Operations Centers</u>	20	20	20
D. <u>Cryptological Direct Support</u>			
<u>Shipborne Missions</u>	165	165	165
<u>Airborne Missions</u>	1,650	1,650	1,650
<u>Units Serviced by Test Groups</u>	1,350	1,350	1,350
E. <u>2-AGOS Operations</u>			
<u>\$000</u>	15,833	9,749	29,646
<u>Number of Ships</u>	10	12	16
F. <u>Electronic Command and Control.</u>			
<u>Ashore Node Commands Supported</u>	275	255	237
<u>Afloat Node Commands Supported</u>	52	87	80
<u>Shipboard EW Items Supported</u>	424	724	477
IV. <u>Personnel Summary</u>	<u>FY 1987</u>	<u>FY 1988</u>	<u>FY1989</u>
A. <u>Military</u>	<u>4,672</u>	<u>5,102</u>	<u>5,250</u>
<u>Officer</u>	501	555	579
<u>Enlisted</u>	4,171	4,547	4,671
B. <u>Civilian</u>	<u>92</u>	<u>110</u>	<u>112</u>
<u>USDH</u>	82	110	112

Department of the Navy
Operation & Maintenance, Navy
Exhibit OP-5

Activity Group: Other Warfare Support
Budget Activity: II - General Purpose Forces

I. Description of Operations Financed.

Funding in this activity group supports a variety of warfare tactics, development and execution efforts designed to improve and enhance Naval Warfighting capabilities. These efforts include warfare tactics development/documentation, and exercise support and analysis.

Operational Readiness Assessment (ORA):

ORA concentrates chiefly in providing fleet exercise reconstruction and analysis and reliability, maintainability, and availability (RM&A) analysis. Fleet exercise reconstruction and analysis provides support to COMNAVSEA acquisition program managers and others for such efforts as exercise planning, installation of monitoring instrumentation aboard ships and aircraft, data collection, data verification and reconstruction, data analysis, and reporting exercise results to participants and planners. The program provides support to all multi-threat, multi-warfare scenario exercises.

RM&A analysis provides program managers and fleet commanders with both logistic support planning data and fleet operational combat systems RM&A equipment trends and problem definition for selected surface AAW and ASW combat systems. During normal operational deployment, combat system equipment operational status is recorded, collected and analyzed. From this data accurate operational RM&A indices are computed, and those factors limiting RM&A are analyzed and reported for corrective action.

Warfare Tactics Documentation:

Warfare Tactics Documentation provides funding for definition, specification, verification, assimilation, analysis, and formulation of data into warfare concepts of utilization for existing equipment and systems, mobilization planning, threat assessments, requirements definition, and fleet deployment operations planning. The product provides fleet users with detailed force deployment data and methods of using data in a timely manner. Both the Tactical Air Combat Training System (TACTS) and the Mid-Atlantic Electronic Warfare Range are used for tactics development and definition.

Fleet Logistics Support:

It is essential that full utilization and exploitation of weapons, techniques and capabilities of forces contribute effectively to overall military objectives. To execute and enhance these capabilities,

Activity Group: Other Warfare Support (cont'd)

fleet exercises provide required training in simulated wartime scenarios. Fleet exercise participation enhances fleet unit proficiency in operating and employing weapon systems and war game strategy. To train units effectively in various geographical, climatic, and diversified economic and political areas, fleet units must deploy to all parts of the world. Funding in this activity group will be used to plan and execute training deployments and redeployments to maintain maximum readiness and rapid deployment capabilities throughout the fleet areas of responsibility.

Tactical Training/Wargaming Support

The Tactical Training/Vargaming Support program is directed toward the phase-in of advanced concepts in tactical training for battle group commanders and senior staff officers. This objective is accomplished through the addition of new curricula centered around, but not limited to, the Enhanced Naval Warfare Gaming System and evolutionary development of the basic wargaming system at the Naval War College in Newport. Funding in this activity group provides support for the Tactical Training Groups at Norfolk and San Diego which have substantial computerized equipment linked by land lines to Newport. Through these Tactical Training Groups, wargaming strategies and concepts are brought directly to the Fleet for their evaluation and participation. Funds are required for site preparation, installation of equipment, operating and technical support for the new systems at the Fleet sites, as well as for associated tactical training support.

Naval Warfare Management

The Naval Warfare Management program provides specialized analytical support for the Naval Warfare Appraisal process and the updating of master plans for selected warfare areas.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout.

	FY 1987	Budget Request	FY 1988	Current Estimate	Initial Estimate	PY 1989 Change	Amended Estimate	Change FY 88/89
OP READINESS ASSESSMENT	5,812	6,070	5,756	5,752	6,508	-430	6,078	326
WARFARE TACTICS DOC	30,574	39,299	38,621	34,146	44,743	-4,817	39,926	5,780
FLT EXERCISE LOG SUPPORT	9,647	9,075	7,521	7,521	8,954	-981	7,973	452
TACTICAL TRAINING / WARGAMING SUPPORT	5,158	2,685	2,685	2,677	2,332	-8	2,324	-353
NAVAL WARFARE MANAGEMENT	5,749	2,653	2,653	2,629	2,721	0	2,721	92
TOTAL ACTIVITY GROUP	56,940	59,782	57,236	52,725	65,258	-6,235	59,022	6,297
				I-2-49				

Activity Group: Other Warfare Support (cont'd)

	<u>Amount</u>
B. <u>Reconciliation of Increases and Decreases.</u>	
1. FY 1988 Current Estimate	\$52,725
2. Pricing Adjustments	1,815
A. Annualization of FY 1988 Pay Raise	
1) Classified	(11)
B. FY 1989 Direct Pay Raise	11
1) Classified	(38)
C. Stock Fund	38
1) Non-Fuel	(-49)
D. Industrial Fund Rates	-49
E. Health Benefits	(172)
F. Other Pricing Adjustments	(5)
1) Other Purchases	(1,638)
3. Functional Program Transfers	1,103
A. Transfers In	
1) Intra-Appropriation	(1,103)
a) Communications/Tactical (COMTAC)	1,103
publications from BA 9	
4. Program Increases	4,420
A. One-Time FY 1989 Increases	
1) Design costs for the new Key West, FL	(239)
TACTS Range.	239
B. Other Program Growth in FY 1989	
1) Operational expansion of Oceana TACTS range	(4,181)
to provide coverage of the Dare County Bombing	2,692
Range, establishment of the Cherry Point and	
Charleston TACTS ranges, and expansion of the	
Cherry Point MAEVR range.	205
2) Increased Operational Readiness Assessment	
support of Battlegroup Exercises and exercise	
Reconstruction and Analysis due to changing	
requirements from year to year.	
3) Increase of 1 civilian workyear required to	28
properly align workyears and end strength to re-	

Activity Group: Other Warfare Support (cont'd)

flect a 2 percent civilian employment lapse rate.

- | | |
|--|-----|
| 4) Increase in West Coast TACTS range support due to increase in range operations and use. | 257 |
| 5) Increased logistical support for fleet exercise and deployment participation based on changes in the number, size, scope and location of fleet exercises and deployments. | 498 |
| 6) Increase for PHM participation in fleet exercises. | 43 |
| 7) Increase for warfare tactics development and documentation to meet fleet utilization of weapon and sensor systems entering operational status. | 458 |

-1,041

9. Program Decreases

- | | |
|---|----------|
| A. One Time FY 1989 Decreases | (-20) |
| 1) Two less civilian workdays in FY 1989. | -20 |
| B. Other Program Decreases in FY 1989 | (-1,021) |
| 1) Decreased number of courses supported at Tactical Training Groups, Atlantic and Pacific (TACTRAGRULANT and TACTRAGRUPAC) and the Naval Oceanographic Systems Command (NOSC). | -461 |
| 2) Cost reduction in target towing contract for SIXTHFLT due to efficiencies resulting from improved targets. | -452 |
| 3) Reductions in headquarters personnel. | -108 |

10. FY 1989 Amended Estimate

\$59,022

Activity Group: Other Warfare Support (cont'd)

III. Performance Criteria.

OPERATIONAL READINESS ASSESSMENTS

Number of Exercises Supported (major)	11	11	11
BG Exercise Support (\$000)	2,464	1,494	1,963
Reconstruction and Analysis (\$000)	2,143	2,164	2,364
Trend Analysis of Battle Group Effectiveness (\$000)	1,034	525	500

WARFARE TACTICS DOCUMENTATION

Commands Supported (TINS)	78	78	78
Number of Installations (NAVSTA/SARS/TRIPQS)	146	146	146
Number of FTL Library Documents Processed	1,375	1,375	1,375
Number of FTL Library Requests Shipped	12,805	13,110	13,110
Number of Naval Warfare Publications/Manuals Updated	451	475	487

TACTICAL TRAINING/VARGAMING SUPPORT

TACTRAGRULANT/PAC and NOSC	61	61	45
Courses of Instruction	7	7	7
Special Vargames			
Soviet Seapower Education	84	84	80
Program Presentations			

FLEET EXERCISE SUPPORT

Number of Exercises Supported	60	52	63
-------------------------------	----	----	----

Activity Group: Other Warfare Support (cont'd)

<u>IV. Personnel Summary</u>	<u>FY 1987</u>	<u>FY 1988</u>	<u>FY 1989</u>
<u>A. Military</u>	<u>360</u>	<u>418</u>	<u>414</u>
Officer	115	146	148
Enlisted	245	272	266
<u>B. Civilian</u>	<u>67</u>	<u>63</u>	<u>63</u>
USDH	67	63	63

Department of the Navy
Operation and Maintenance, Navy

Activity Group: Fleet Air Training

Budget Activity: II - General Purpose Forces

I. Description of Operations Financed.

This program provides funds for flying hours and aviation training support of Navy/Marine Fleet Readiness Squadrons (FRS). The operations financed in this program are the day-to-day operating costs for civilian labor, administrative supplies, materials, equipment, maintenance service contracts, and travel of personnel required in support of the training mission.

Fleet Air Training. There are 25 Navy and 7 Marine Fleet Readiness Squadrons funded in this program. Twenty-eight squadrons train replacement air crews for the Navy and Marine TACAIR/ASW communities in weapons tactics training, weapons delivery qualifications and where applicable, carrier landing qualifications. Graduates of these replacement squadrons are qualified for assignment to active squadrons. The other four squadrons provide instrument ground and flight training to fleet pilots, and adversary services to fleet squadrons in air-to-air combat training. This activity group also supports training operations at the Naval Fighter Weapons School at NAS Miramar, and the Naval Strike Warfare Center at NAS Fallon.

Student training levels are based on authorized TACAIR/ASW force levels and aircrew/maintenance personnel rotation rates. Funds requested include the cost of petroleum, oil and lubricants (POL), organizational and intermediate maintenance, squadron supplies, and Aviation Depot Level Repairables. The cost per operating hour for each aircraft is based on actual operating data over the previous 18 month period.

Fleet Air Training Support. The purpose of this program is to support Navy/Marine FRS's in their mission of conducting replacement air crew training. Included in this program are the Fleet Aviation Specialized Operational Training Groups Atlantic Fleet and Pacific Fleet (FASOTRAGRU) and funding for the Contract Operation and Maintenance of Simulators (COMS).

The mission of the FASOTRAGRU's is to provide training in weapon systems and equipment (including special weapons) and to maintain proficiency by conducting special program inspections. Associated training of personnel includes:

Anti-Submarine Warfare Equipment/Tactics
Anti-Ship Missile Defense Equipment Tactics
Electronic Warfare Equipment Tactics/Radar Navigation/Communication
Special weapons delivery tactics, procedures, and handling.

Activity Group: Fleet Air Training (cont'd)

The Training Groups are responsible for operation and maintenance of ground training and flight simulation facilities, including weapons system trainers and operational flight trainers, film libraries, associated aviation training aid/devices and equipment.

The COMS program commenced in 1984 as a result of the decision to eliminate organic Navy support of simulators and training devices. The contractor performs all levels of maintenance, replaces spare and repair parts consumed, and must meet availability and maintainability criteria.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout:

	FY 1988			FY 1989		
	FY 1987	Budget Request	Approp	Current Estimate	Initial Estimate	Change
Aircraft Ops	438,792	360,493	356,493	406,638	400,205	-20,616
Air Staffs	5,161	8,507	8,384	8,323	8,541	-80
Air TAD	4,450	4,694	4,348	4,348	6,869	-2,463
Other Aircraft Sup	24,893	41,883	32,552	40,040	46,207	-1,993
Less AVDLR Credits	-41,227	0	0	0	0	0
Total Act. Group	432,069	415,577	401,777	459,349	461,822	-25,152
					436,670	-22,679

Activity Group: Fleet Air Training (cont'd)

AMOUNT

B. Reconciliation of Increases and Decreases.

1. FY 1988 Current Estimate		
2. Pricing Adjustments		
A. Annualization of FY 1988 Direct Pay Raise	(106)	
1) Classified	53	
2) Wage Board	53	
B. FY 1989 Direct Pay Raise	(158)	
1) Classified	121	
2) Wage Board	33	
3) Foreign National Direct	4	
C. Stock Fund	(-30,079)	
1) Non-Fuel	-30,079	
D. Industrial Fund Rates	(8)	
E. Other Purchased Services	(2,116)	
		40,303
3. Program Increases		
A. Annualization of FY 1988 Increase	(5,011)	
1) Contract Operation and Maintenance of	5,011	
Simulators (COMS). Annualization of Contract		
Operation and Maintenance of Simulators (COMS)		
in accordance with SECNAV approved phase out		
of the TRADEVMAN rating.		
B. Program Increases	(35,292)	
1) Adversary Training. Increase in hours and	14,357	
contract maintenance for the F-16N, TF-16N,		
and A-4 adversary aircraft. Reflects full year		
operations of F-16Ns at TOPGUN and emergence		
of the F-16 as the primary adversary aircraft.		
Increase in A-4 hours are required to maintain		
current level of east coast adversary training		
since the KFIR leaves the inventory at the end		
of FY 1988.		
4) F/A-18 (HQRNET). Increased hours for	9,832	
Navy/Marine Corps training. Reflects full		
operation of Marine Corps FRS including the		
training requirements of 24 additional students.		
5) Training Support. Increase is for training	40	
support for personnel destined for fleet		
assignments in the functioning of specialized		
1-2-56		

Activity Group: Fleet Air Training (cont'd)

operational and tactical weapons systems and equipments.

6) KC-130 (HERCULES). Increased hours required to train 11 additional KC-130 students as new FRS matures and is capable of carrying a full student load. 1,224

7) A-6 (INTRUDER). Increased flying hours to meet training requirements for 25 additional students. 4,462

8) Contract Maintenance. Increase provides for conversion from a site-support maintenance contract to full contract maintenance for the TC-4C. Economic analysis determined that contract vice in-house maintenance was more cost effective for the Navy for this aircraft. 1,477

9) SH-60F (SEAHAWK). Flying hours for the first 3 SH-60Fs which will operate in the Fleet in FY 1989. This new aircraft will provide carrier Search and Rescue (SAR) support and contribute significantly to close-in ASW operations aimed at countering the submarine threat. 2,362

10) WH-53 (SUPERSTALLION). Increased flying hours necessary to meet training requirements of 16 additional students. 1,539

-35,291

4. Program Decreases

A. one-time FY 1988 Costs (-54)

1) Reduction of two civilian workdays. -54

B. Other Program Decreases (-35,237)

1) F-4 (PHANTOM). Decommissioning of Marine Corps F-4 training squadron. -1,369

2) A-7E (Corsair). Reduction in A-7 training requirements as Navy continues transition to FA-18. -2,548

3) F-21 (KFIR). Contract maintenance and fuel cost reduction for the F-21 which will not be in the active inventory in FY 1989 due to the completed life-cycle of the aircraft. -19,957

4) TA-4J. Decreased hours due to fewer 1-2-57 -4,024

Activity Group: Fleet Air Training (cont'd)

aircraft in the inventory.

5) SH-3 (SEAKING). Decreased flying hour requirement based on reduction of 75 students requiring training.

-4,497

5) Fleet Air Training Hours. Decrease results from minor changes in the mix of flying hours required to adequately train aviators in the FRSS.

-1,251

6) Other Aircraft Support. Reductions in printing and training support services for Navy Fighter Weapons School (TOPGUN) and the Naval Strike Warfare Center.

-85

7) Civilian Personnel. Reduction of nine civilian end strength (6 workyears) as a result of efficiency reviews at FRSS and in the area of Instructional System Development (ISD) support.

-90

-1,416

8) Flying Hours. Reduction in the overall cost of flying hours based on a change in the mix of hours budgeted and changes in student mix and load requirements.

\$436,670

9. FY 1989 Amended Estimate
III. Performance Criteria

A. Aircraft Operations

	FY 1987			FY 1988		
	Average Operating Aircraft	Flying Hours	Cost (\$000)	Average Operating Aircraft	Flying Hours	Cost (\$000)
Total Hours Per A/C \$ per Hour	691	256,202	\$431,166	706	252,423	\$406,638
		371			358	
			\$1,683			\$1,611

	FY 1989		
	Average Operating Aircraft	Flying Hours	Cost (\$000)
Total Hours Per A/C \$ Per Hour	705	254,790	\$379,589
		361	
			\$1,490

1-2-58

Activity Group: Fleet Air Training (cont'd)

	<u>FY 1987</u>	<u>FY 1988</u>	<u>FY 1989</u>
B. Number of Flight Simulators			
Under COMS	93	126	134
Simulator Hours Programmed	254,610	286,006	313,241

IV. Personnel Summary.

End Strength

A. Military

Officer
Enlisted

B. Civilian

USDH
FNDH

	<u>FY 1987</u>	<u>FY 1988</u>	<u>FY 1989</u>
	16,836	17,070	16,577
	2,648	2,502	2,466
	14,188	14,568	14,111
	407	497	488
	392	482	473
	15	15	15

Department of the Navy
Operation & Maintenance, Navy
Exhibit OP-5

Activity Group: Fleet Ship Training

Budget Activity: II - General Purpose Forces

I. Description of Operations Financed.

Functions which are financed within this program include classroom instruction, shipboard training, underway and inport training and assistance visits aboard ships, shipboard inspections of special weapons, shakedown and refresher training, and shipboard team training using mobile simulators. The costs of using fleet training ranges and developing post-exercise analysis for range users are also included.

The funding requested under this program is specifically used for the accomplishment of the following types of training:

Special Weapons Training. Includes funding to support special weapons technical inspections and assist visits where fleet units are located. Special Weapons Acceptance Inspections are conducted to ensure that a ship is capable of properly handling nuclear weapons prior to their placement aboard ship. Special Weapons Technical Proficiency Inspections are conducted on board ships which carry special weapons to ensure that training, security, safety, emergency, technical, command and control, and administrative procedures comply with established guidelines and regulations. Classroom training in various special weapons subject areas (including basic fundamentals, logistic support, safety, officer orientation and indoctrination, in special weapons, chemical warfare programs, and biological research) provide trained personnel directly to fleet units. Shipboard special weapons training emphasizes security, weapons handling, administration, emergency destruction and accident response.

Shakedown and Refresher Training. This training is conducted for ships which have recently been constructed, reactivated, or overhauled and are preparing for overseas deployments and fleet exercises. Training is provided and exercises are conducted in key shipboard areas such as damage control, firefighting, gunnery, navigation, engineering, communications, shiphandling, basic seamanship, and in the ship's primary warfare areas so that the ship is more prepared for combat and can safely and effectively participate in fleet operations. In addition to underway training, crews receive inport training that is that includes electronic warfare training and weapons systems team training. The time required for training can range from two days to seven weeks, depending upon the size of the ship and the previous underway training that the crew has received. The same facilities and personnel that are used for the training of U.S. Navy ships are also used for the training of ships from the Coast Guard and foreign Navies.

Inport Tactical Training. Includes schoolhouse and pierside tactical training, which is supported by

Activity Group: Fleet Ship Training (cont'd)

the use of mobile vans that are designed to simulate a variety of at sea threat environments. Functions in this area are designed to facilitate tactical proficiency at the unit, squadron, and battlegroup levels of operation.

Engineering Training. Includes school house training and cyclic visits to ships by Engineering Mobile Trainin. Teams, whose mission is to train personnel in correct engineering practices and to assist them in preparing for periodic propulsion examinations and inspections. During these visits the ship's main propulsion and damage control organizations are examined and evaluated in such areas as material condition, preservation and cleanliness, administration, level of personnel knowledge, training, drills and various other evolutions.

Training Ranges. Funding for training range operations provides aerial and surface targets, electronic warfare training, anti-submarine warfare readiness effectiveness measuring, and mine recovery operations. Funding is also used for post-exercise reconstruction and analysis to determine how well individual units perform while operating on the ranges.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout:

	FY 1987		FY 1988		FY 1989		Amended Estimate	Change FY 88/89
	FY 1987	Budget Request	Approp	Current Estimate	Initial Estimate	Change		
Flt. Ship Training Support	7,623	6,334	6,155	6,130	5,792	-539	5,253	-877
Fleet Training Ranges	40,356	37,743	36,002	35,915	37,788	34	37,822	1,907
Total Act. Group	47,979	44,077	42,157	42,045	43,580	-505	43,075	1,030

B. Reconciliation of Increases and Decreases.

1. FY 1988 Current Request		Amount
		\$42,045
2. Pricing Adjustments		1,411
A. Annualization of FY 1988 Direct Pay Raise	(20)	
1) Classified	20	
B. FY 1989 Direct Pay Raise	(46)	
1) Classified	46	
C. Stock Fund	(-97)	
	1-2-61	

Activity Group: Fleet Ship Training (cont'd)

1) Non-Fuel	-97	
D. Industrial Fund Rates	(471)	
E. Other Pricing Adjustments	(971)	
1) Health Benefits	7	
2) FERS	7	
3) Other Purchases	957	
		-137
3. Functional Program Transfers		
A. Transfers Out	(-137)	
1) Intra-Appropriation	(-137)	
a) Transfer of on-the-job (OJT) training packages for the following programs from the Space and Naval Warfare Systems Command (BA2) to the Naval Air Systems Command (BA8) : ALQ-167/AST-4 (-29), ALQ-170 (-49), and Fleet Air Electronic Warfare Systems (FAEVS) improvements (-59).	-137	
		2,784
4. Program Increases		
A. One-Time FY 1989 Costs	(872)	
1) Overhaul of the St. Croix Capri radar (+273) and Nike Hercules radar (+422) that are used on Atlantic Fleet Underwater Test Range (UTR).	695	
2) Contractor support required for training in the operation of the Wide Area Active Surveillance (WAAS) system (1.25 contractor workyears.)	177	
		1,912
B. Other Program Growth In FY 1989	(1,912)	
1) Civilian substitution for shore rating reduction (1 work year).	21	
2) Funding for Fleet Air Control and Surveillance Facility (FACSFAC) at the Atlantic Fleet Weapons Training Facility (AFWTF) to manage the Puerto Rico Operational Area. There are major	301	
		1-2-62

Activity Group: Fleet Ship Training (cont'd)

- deficiencies in the overall Air Traffic Control (ATC) for ensuring adequate separation, airspace integrity, and inter-agency coordination within and surrounding the offshore training area. A FACSAC at AFWTF will enhance the air traffic control facility at the Naval Station Roosevelt Roads and improve flight safety. 556
- 3) Purchase of spares for the Tactical Digital Information Link-C, Threat Platform Simulator AN/TPS-1, Command and Control Processing Display System, and the Laser Target Scoring System at the Atlantic Fleet Weapons Training Facility. Adequate spares for these systems are not currently on hand and spares cannot be cannibalized to repair this equipment. 249
- 4) Increased contractor operated range costs associated with increased range size and usage of the underwater acoustic tracking range (UTR) at the Atlantic Fleet Weapons Training Facility. The underwater acoustic tracking area at the AFWTF has been expanded from 82 square nautical miles to 322 square nautical miles to eliminate operational constraints and to accommodate the minimum readiness requirements of an expanded fleet. The expanded UTR will give more units increased time on range. Contractor manning increases are required to support increased workload. 50
- 5) Contractor support services for a stand alone SARCON air traffic control (ATC) display console at the Atlantic Fleet Weapons training facility. 600
- 6) Adjustments to service craft overhaul schedule. Includes funding for overhaul of Torpedo Retriever Boat 3 (TRB-3). 100
- 7) Purchase of communications lines in support of the Multi-Unit Tactical System (MUTTS) and Battle Force Inport Training (BFTT). 35
- 8) Additional operations and maintenance funding for the mobile Southern California Anti-Submarine Warfare Sea Range. Includes 1-2-63

essential funding to support the range training of operating forces.

-3.028

 $(-2, 054)$

- 1) Reduction of two civilian workdays.
- 2) Reductions to the overhaul schedule of service craft at the Atlantic Fleet Weapons Training Facility, including TRB-4 (-622), VB/LCU 1637 (-726), VB/LCU 755 (-519) and general RATA reduction (-173).

(-974)

- 1) General reduction in supplies, materials, and equipment resulting from planned efficiencies in training support programs.
- 2) Decrease reflects completion of apprentice level training packages for the following programs: ALQ-170 (-133), ALQ-167 (-64), ALT-40 and Fleet Air Electronic Warfare System (FAEWS) (-308), ULQ-13 (-108), ULQ-18 (-270), and AN/SSQ-74 (-58).

\$43.075

FY 1987

Number of Courses Scheduled	1,783	1,896	1,962
Student Throughput	171,668	178,317	183,111
Average Number of Students in Training	2,701	2,879	2,979
No. of Ships Scheduled for Refresher Training	303	316	322
Special Weapons Technical Inspections	399	400	401
	1-2-64		

Activity Group: Fleet Ship Training (cont'd)

Personnel Trained in Special Weapons

	745	746	746
	<u>FY 1987</u>	<u>FY 1988</u>	<u>FY 1989</u>
	2,027	2,082	2,100
	349	384	378
	1,678	1,698	1,722
	87	98	98
	87	98	98

IV. Personnel Summary.

End Strength

A. Military

Officer
Enlisted

B. Civilian

USDA

Department of the Navy
Operation & Maintenance, Navy

Activity Group: Unified Commands
Budget Activity: II - General Purpose Forces

I. Description of Operations Financed.

The unified commands direct tri-service forces in joint operations in support of national objectives. The unified commands supported are the Commanders in Chief, U. S. Atlantic (USCINCLANT) and Pacific (USCINCPAC), subordinate commands, and special tri-service programs. The funds requested provide for the day-to-day operating cost of these commands, including pay of civilian personnel, administrative supplies and equipment, travel, training, maintenance of office equipment, utilities, and communications.

Funds in this program are also requested for Overseas Military Banking. The cost of this program is determined on a defense-wide basis and allocated to the services in relation to the banking facilities within their respective areas of responsibility. The total defense-wide cost of the program is the net of expenses and income. Expenses include normal operating expenses and a fixed management fee. Income includes service charges and interest income earned on investable balances of accounts maintained at the banking facilities. Funds required for Overseas Military Banking vary inversely with interest rates.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout.

	FY 1987	FY 1988		FY 1989		Change FY 88/89
		Budget Request	Approp	Current Estimate	Initial Estimate	
					Amended Estimate	
Unified Commands	44,972	24,250	23,081	23,432	25,097	-358
Total Act. Group	44,972	24,250	23,081	23,432	25,097	-358
					25,474	+2,042
					25,474	+2,042

Activity Group: Unified Commands (Cont'd)

	<u>Amount</u>
B. Reconciliation of Increases and Decreases.	
1. FY 1988 Current Estimate	\$23,432
2. Pricing Adjustments	736
A. Annualization of FY 1988 Direct Pay Raise	
1) Classified	(56)
2) Foreign National Direct	50
B. FY 1989 Direct Pay Raise	6
1) Classified	(163)
2) Foreign National Direct	152
C. Stock Fund	11
1) Non-Fuel	(-35)
D. Industrial Fund Rates	-35
E. Other Pricing Adjustments	(-1)
1) Health Benefits	(553)
2) Other Purchased Services	29
	523
3. Functional Program Transfers	556
A. Transfers In	
1) Intra-Appropriation	(556)
a) Transfer of per diem, travel and staff positions from Fleet Commands and Staff activity group to properly align funding with administrative responsibility.	556
4. Program Increases	837
A. Other Program Growth in FY 1989	
1) Program increase for forward air control radar design, review and installation at Joint Air Reconnaissance Control Centers. This increase properly aligns installation and design funding with expected radar deliveries.	509
2) Increase at Commander, U.S. Forces Japan for administrative support at the recently established Command Coordination Center.	122

Activity Group: Unified Commands (Cont'd)

124

3) Program increase at Commander, U.S. Forces, Japan for inter-service support agreement (ISSA) funding for transportation support which includes maintenance, fuel, oil and repair parts and COMUSJAPAN's portion of the increase cost for operations of the Sanno Hotel in Tokyo.

82

4) Provides funds for maintenance support of Joint Air Reconnaissance Control Center, (JARCC), Key West to resolve recurring equipment operation problems.

-87

(-82)
-82

5. Program Decreases

A. One-Time FY 1988 Costs

1) Two less workdays of civilian employment in FY 1989.

B. Other Program Decreases in FY 1989

1) Reduction in contractor support services in FY 1989 based on management review of program.

(-5)
-5

\$25,474

6. FY 1989 Amended Estimate

III. Performance Criteria.	FY 1987		FY 1988		FY 1989	
	OE\$MNS	CIV	OE\$MNS	CIV	OE\$MNS	CIV
USCINCLANT	6,486	64	5,569	76	6,732	76
USCINCPAC	14,263	175	10,298	196	10,250	199
COMUSNAVSO	551	4	365	4	357	4
Joint Special Operations	6,414	0	0	0	0	0
Overseas Banking	16,682	0	7,200	0	7,400	0
COMNAVSPCWARCOM	576	0	0	0	0	0
Total Unified Commands	44,972	243	23,432	276	24,739	279

Activity Group: Unified Commands (Cont'd)

IV. Personnel Summary.

<u>End Strength (E/S).</u>	<u>FY 1987</u>	<u>FY 1988</u>	<u>FY 1989</u>
A. <u>Military</u>	<u>822</u>	<u>844</u>	<u>851</u>
Officer	350	368	370
Enlisted	472	476	481
B. <u>Civilian</u>	<u>243</u>	<u>276</u>	<u>279</u>
USDH	233	265	268
FNDH	3	3	3
FNTH	7	8	8

Department of the Navy
Operation & Maintenance, Navy

Activity Group: Fleet Commands and Staffs
Budget Activity: II - General Purpose Forces

I. Description of Operations Financed.

Fleet Commands and Staffs exercise command, operational control and coordination over assigned forces including employment of all units (ships, aircraft, support activities and other related units). They plan for, and when required, conduct operations to protect assigned forces, control vital sea areas, and protect sea lines of communications.

The funds requested provide for the day-to-day operating costs of the Commander-in-Chief, U.S. Naval Forces Europe, the Atlantic and Pacific Fleet Commanders and their staffs, and other staffs reporting directly to the Chief of Naval Operations and directly supporting the operating forces. Funding also pays for the operation of Armed Forces Radio and Television service, the Navy Imaging Command and Navy Internal Relations Activity.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout.

	FY 1988			FY 1989		
	FY 1987	Budget Request	Approp	Initial Estimate	Change	Current Estimate
Staff Admin	92,627	90,726	84,864	88,732	-11,440	77,292
Armed Forces Radio & Television	8,101	9,432	9,246	9,480	-512	8,968
Navy Imaging Cmd	6,905	7,216	7,216	6,947	-20	6,927
Total Act. Group	107,633	107,374	101,326	105,159	-11,237	93,187
						-4,897

B. Reconciliation of Increases and Decreases.

1. FY 1988 Current Estimate

\$98,084

2. Pricing Adjustments		3,080
A. Annualization of Direct Pay Raise	(1,061)	
1) Classified	1,014	
2) Wage Board	7	
3) Foreign National Direct Hire	40	
B. Direct Pay Raise	(1,183)	
1) Classified	1,159	
2) Wage Board	2	
3) Foreign National Direct Hire	22	
C. Stock Fund	(195)	
1) Non-Fuel	195	
D. Industrial Fund Rates	(714)	
E. FNIH Pay Adjustment	(13)	
F. Other Pricing	(-86)	
3. Functional Program Transfers		-699
A. Transfers-Out	(-556)	
1) Intra-Appropriation		
a) Transfer of per diem, travel and staff positions to Unified Commands activity group to align funding with administrative responsibility.		
b) Transfer of Standard Level User Charges (SLUC) to Budget Activity 9 for Navy Internal Relations Activity (NIRA).	(-143)	
4. Program Increases		190
A. Annualization of FY 1988 Increases	(44)	
1) Annualization of two civilian workyears for civilian substitution/shore rating reduction.	44	
B. Other Program Increases	(146)	
1) Increase at U.S. Naval Forces Central Command for improved satellite communications.	146	
5. Program Decreases		-6,743
	1-2-71	

Activity Group: Fleet Commands and Staffs (cont'd)

A. One Time FY 1988 Costs (-929)

- 1) Two less workdays of civilian employment in FY 1989. -248
- 2) Termination of FY 1988 funding for leasing of warehouses at ASU Bahrain. -681

B. Other Program Decreases in FY 1989 (-6,549)

- 1) Decrease in materials, supplies, travel and ADP support at Fleet Headquarters, Air Staffs and Units, Submarine Squadrons and Staffs, Surface Squadrons and Groups and Other staff units in anticipation of more efficient operations. -343
- 2) Reduction at Naval Imaging Command resulting from reduced distribution of films and video cassettes, as well as more efficient production efforts.

5. FY 1989 Amended Budget Request \$93,187

III. Performance Criteria.

	FY 1987			FY 1988			FY 1989		
	O&M,N	CIV	E/S	O&M,N	CIV	E/S	O&M,N	CIV	E/S
CINCLANTFLT	7,118	130		6,357	146		5,036	147	
CINCPACFLT	8,845	99		6,939	98		5,804	98	
CINCUSNAVEUR	1,771	37		2,266	46		2,378	46	
TYPE COMMANDERS	31,183	640		25,880	641		24,769	640	
Submarine Sqdn Staffs	3,233	0		3,569	0		3,925	0	
Surface Sqdn Staffs	5,568	2		3,235	3		2,861	3	
Other Fleet Staffs/Units	21,607	358		19,827	354		19,544	354	
COMINEVARCOM	1,851	23		1,846	22		1,707	22	
COMFAIRMED	1,031	11		1,245	12		1,277	12	
Naval Imaging Command	6,905	109		7,115	121		6,927	121	
Armed Forces Radio/Television	6,658	19		7,488	23		7,517	23	
Navy Tact Interoperability									

1-2-72

Activity Group: Fleet Commands and Staffs (cont'd)

Support Activity	4,796	16	4,892	16	4,778	16
COMOPTEVFJR	518	0	538	0	538	0
COMM Second Fleet	486	0	502	0	428	0
COMM Third Fleet	0	0	0	0	0	0
COMM Sixth Fleet	0	0	0	0	0	0
COMM Seventh Fleet	261	0	138	0	122	0
Joint Deployment System/ Strategic Mobility System	3,035	0	3,492	0	3,410	0
Navy Internal Relations Activity	1,443	14	1,546	17	1,451	17
COMUSNAVCENT	1,324	2	1,209	2	715	2
TOTAL	107,633	1,464	98,084	1,501	93,187	1,501

IV. Personnel Summary.

	FY 1987	FY 1988	FY 1989
A. Military E/S	11,262	11,134	10,945
Officer	3,477	3,740	3,593
Enlisted	7,785	7,394	7,352
B. Civilian E/S	1,464	1,501	1,501
USDH	1,431	1,467	1,467
FNDH	20	20	20
FNTH	13	14	14

Department of the Navy
Operation & Maintenance, Navy
Exhibit OP-5

Activity Group: Cruise Missile

Budget Activity: II - General Purpose Forces

I. Description of Operations Financed

The mission of the Joint Cruise Missiles Project (JCMP) is to develop, test, evaluate, acquire and support the Navy and Air Force Cruise Missiles and to maximize subsystem, component and software commonality to derive maximum benefit from the management of the several Cruise Missile programs. Through this program, JCMP provides for overall management and engineering support of the Sea Launched Cruise Missile and Ground Launched Cruise Missiles.

Project Office, included in this activity group in FY 1987 and prior years, support funds salaries for Navy civilian personnel and general operating expenses including rentals, office furniture, equipment, supplies, and administrative travel needed to sustain the Joint Project Office. The efforts provided by the project staff include procurement, development and production contract management; planning, programming and budgeting support; and office and administrative services.

As part of the Secretary of the Navy's organization streamlining efforts, project office support of the JCMP has been consolidated with the Naval Air Systems Command in FY 1988.

Remaining in this activity groups is engineering support which funds the Operations and Engineering effort required to maintain the TOMAHAWK Weapon System. This includes:

A. Operational Test Launch (OTL) Flight Test

OTL flight tests are the primary means for evaluating production missiles to determine and monitor operational readiness and aging effects of the deployed weapons system. Tests will also be used to support fleet training, tactics development and to provide diagnostic information which can be used to enhance weapon system effectiveness.

The OTL scenario encompasses returning a fleet "All-Up-Round" (AUR) to the TOMAHAWK Weapons Facility (TWF) for pre-flight preparation including installation of a Range Safety System or a Recovery Exercise Module. Detailed test planning in concert with appropriate fleet activities and the flight test is conducted using a realistic operational scenario.

Activity Group: Cruise Missile (cont'd)

Following an OTL flight test, the missile is recovered, refurbished at the TWF and returned to the operational inventory. Program costs include range support, flight test instrumentation, target support, data reduction, and labor performed during pre-flight preparation and post-flight refurbishment.

The OTL program is the only method for accurately monitoring flight reliability of production rounds to ensure product integrity.

B. Depot Maintenance

TOMAHAWK missiles will be returned to the TOMAHAWK Weapons Facilities (TWF) for examination and recertification (periodic maintenance). Any retrofits and/or modifications of the missile will be accomplished during the recertification process. Also, missiles are refurbished after an OTL or rework if damaged during fleet handling at the TWF.

C. Nuclear Safety and Certification and SEARA Efforts

The Nuclear Safety and Certification effort includes Nuclear Safety Analysis (NSA) update to support changes to the baseline (IOC) systems, and for follow-on platforms and updates to the Independent Software Nuclear Safety Analysis (ISNSA) for changes to the software and firmware. Both Surface Ship and Submarine TOMAHAWK Weapon Systems are covered. The Stockpile Evaluation and Reliability Assessment (SEARA) program is joint DOE-Navy assessment of the W80-0. The program includes Quality Assurance Stockpile Tests, Stockpile Laboratory Tests and Joint Integrated Laboratory Tests.

D. Maintenance/Technical Support

Maintenance/Technical Support includes software maintenance, platform maintenance requirements, logistics and technical support. Software upkeep is required separately for the anti-ship and land-attack cruise missile variants. Platforms maintenance requirements include support of the Surface Ship Weapons Control Systems, the Armored Box Launchers, the Vertical Launch System, the Submarine Combat Control Systems MK 1 and Torpedo Tube Launchers. Logistics and technical support includes ILS management, training, technical manual updates, in-service engineering, and TOTEM support. The TOMAHAWK Test Missile (TOTEM) is an unboosted, launchable and recoverable encapsulated test missile for use in testing TOMAHAWK compatibility with the Submarine MK 1 Fire Control System and the Torpedo Tube Launcher.

E. Mission Planning Centers (MPC's)

The Mission Planning Centers develop and maintain the software programs which control independently the

1-2-75

Activity Group: Cruise Missile (cont'd)

Land Attack Cruise Missiles. O&M,N costs associated with the MPC's are for software maintenance and upkeep of the centers.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout:

	FY 1987	FY 1988		FY 1989		Change FY 88/89
		Budget Request	Approp	Current Estimate	Initial Estimate	Amended Estimate
Project Office	11,466	0	0	0	0	0
Engineering Support	93,175	106,27	106,277	106,277	116,833	119,208
<u>Total</u>	104,641	106,277	106,277	106,277	116,833	119,208
						12,931

B. Reconciliation of Increases and Decreases

	Amount
1. FY 1988 Current Estimate	\$106,277
2. Pricing Adjustments	3,439
A. Industrial Fund Rates	(329)
B. Other Pricing Adjustments	(3,110)
3. Functional Program Transfers	
A. Transfer In	3,800
1) Inter-Appropriation: Transfer of resources 1-2-76	(3,800)

Activity Group: Cruise Missile (cont'd)

for contractor support services from Weapon Procurement, Navy (WPN) appropriation.

3,800

9,420

4. Program Increases

A. Other Program Growth in FY 1989

- 1) Supports one additional Operational Test Launch (OTL) to achieve minimum operational confidence levels and ensure missile reliability.
- 2) Depot Maintenance in support of 24 recertifications, installation of modification kits to achieve current missile configuration and depot supply management.
- 3) Launch Control supports the installation of upgrades to ship fire control systems for TOMAHAWK and the required ship weapons systems certifications.
- 4) Depot Supply/Technical Support provides the In-Service Engineering Agent Support (ISEA) technical manual updates, and Naval Weapon Station (NWS) operations. ISEA support increases are a result from an increase of 20 TOMAHAWK platforms. Savings associated with Navy management emphasis on the elimination of inefficiencies in engineering and logistic support efforts have been factored into the increase.
- 5) Theater Mission Planning Centers supports increased maintenance resulting from THPC upgrades.

(9,420)
778

5,032

978

2,008

624

5. Program Decreases

A. Other Program Decreases in FY 1989

- 1) Depot Maintenance decrease of 3 missile and 3 REM refurbishments.
- 2) Decrease in Nuclear Safety Analysis requirements resulting from the need to conduct less extensive tests since prior testing has resolved major early-on nuclear

(-3,728)

-1,673

-755

1-2-77

-3,728

Activity Group: Cruise Missile (cont'd)

- safety software problems.
 3) Platform Maintenance decrease due to
 efficiencies in economies of scale as more
 weapon systems are installed.

-1,300

\$119,208

6. FY 1989 Amended Estimate.

III. Performance Criteria

	<u>FY 1987</u>	<u>FY 1988</u>	<u>FY 1989</u>
Platform Maintenance	59	78	98
TOTEM Maintenance Facilities	5	5	5
Operational Test Launch Flight Test	14	16	17
Refurbishments	13	10	7
Recertifications	65	105	129
Theater Mission Planning Centers	3	3	3

IV. Personnel Summary.

	<u>FY 1987</u>	<u>FY 1988</u>	<u>FY 1989</u>
End Strength (E/S)			
A. Military	72		
Officer	62		
Enlisted	10		
B. Civilian	234		
USDR	234		

Department of the Navy
Operation & Maintenance, Navy
Exhibit OP-5

Activity Group: Maintenance of Real Property
Budget Activity: II General Purpose Forces

I. Description of Operations Financed.

This program provides maintenance, repair and minor construction of all buildings, structures, grounds and utility systems at major fleet bases and aviation activities to permit assigned forces and tenants to perform their missions.

The major elements of this program are:

- o Facilities Maintenance - finances scheduled, day-to-day recurring maintenance, and emergency service work needed to preserve facilities.
- o Major Repairs - provides major repairs necessary to bring existing facilities into adequate condition to support assigned missions.
- o Minor Construction - finances the erection, installation or assembly of real property facilities; the addition, extension alteration, conversion or replacement of existing real property facility.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout.

	<u>FY 1987</u>	<u>FY 1988</u>		<u>FY 1989</u>			<u>Change FY 88/89</u>	
		<u>Budget Request</u>	<u>Approp</u>	<u>Current Estimate</u>	<u>Initial Estimate</u>	<u>Change</u>		<u>Extended Estimate</u>
Facilities Maintenance	278,750	256,275	245,734	246,397	268,094	6,063	274,157	27,760
Major Repair Projects	210,116	189,049	143,306	135,452	89,434	-14,298	75,136	-60,316
Minor Construction	55,272	38,847	38,042	35,056	34,959	-6,098	28,861	-6,195
Total, Activity Group	544,138	484,171	427,082	416,905	392,487	-14,333	378,154	-38,751

Activity Group: Maintenance of Real Property (cont'd)

<u>B. Reconciliation of Increases and Decreases.</u>		<u>Amount</u>
1. FY 1988 Current Estimate		\$416,905
2. Pricing Adjustments		14,540
A. Annualization of FY 1988 Direct Pay Raise	(993)	
1) Classified	36	
2) Wage Board	520	
3) Foreign National Direct	437	
B. Annualization of FY 1987 Wage Grade Pay Raise	(46)	
C. FY 1989 Pay Raise	(1,070)	
1) Classified	105	
2) Wage Board	237	
3) Foreign National Direct	728	
D. Foreign National Direct Separation Liability	(-8)	
E. Stock Fund	(-816)	
1) Non-Fuel	-816	
F. Industrial Fund Rates	(2,047)	
G. FN Indirect	(869)	
H. Health Benefits	(45)	
I. Annualization of FERS	(265)	
J. Other Pricing Adjustments	(10,029)	
1) Other Purchases	10,029	
3. Program Increases		1,400
A. Other Program Increases in FY 1989		
1) Increase of 57 CIVPERS work years for maintenance of facilities at new or expanded strategic homeports (New York, Mobile, Pascagoula, and Galveston).	(1,400)	
4. Program Decreases		-54,691
A. Other Program Decreases in FY 1989		
1) Projected end-strength and dollar savings resulting from scheduled Efficiency Reviews.	(-234)	
2) Savings associated with increased oversight of MRP contracts by the Naval Facilities Engineering Command. Increased oversight is expected to lead to a lower rate of change orders and an improvement in design thereby reducing the cost of MRP contracts.	(-132)	

Activity Group: Maintenance of Real Property (cont'd)

- 3) Civilian employment - two less paid days in FY 1989. (-374)
- 4) Savings associated with decisions to convert to contractor performance resulting from A-76 CA studies. (-858)
- 5) Deferral of major repair and minor construction projects. (-51,399)

5. FY 1989 Amended President's Budget Request \$378,154

III. Performance Criteria.

Maintenance of Real Property

Backlog, Maintenance/Repair (\$000)	759,843	855,408	993,624
Total Building	136,470	137,734	139,082

IV. Personnel Summary.

A. Military	FY 1987	FY 1988	FY 1989
Officer	502	477	474
Enlisted	26	36	37
	476	441	437
B. Civilian			
	2,544	2,268	2,151
USDH	1,338	1,189	1,078
FNDH	619	601	596
FNTH	587	478	477

Department of the Navy
Operation & Maintenance, Navy
Exhibit OP-5

Activity Group: Base Operations
Budget Activity: II General Purposes Forces

I. Description of Operations Financed.

This program provides the base support services and material required at major fleet bases and air stations to permit assigned forces and tenants to perform their missions.

The major elements of this program are:

- o Utility Operations - Includes operating expenses for purchased electricity, electricity generating plants, purchased steam and hot water, heat plants, utility distribution systems, waste systems, air conditioning and refrigeration plants.
- o Personnel Operations - Support required for personnel related functions include expenses for:
 - Bachelor Housing Operations and Furnishings - provides support for the operation of barracks and the purchase and maintenance of personnel support equipment related to this housing.
 - Other Personnel Support - provides for mess halls, sales activities, laundry and dry cleaning facilities. Previously separate sub-activity groups were consolidated under this sub-activity group. They were 1) Station Hospitals, Medical and Dental Clinics - direct and indirect health care costs for Health Care Facilities not under the financial control of the Navy Medical Command and 2) Human Goals - provides support for programs which focus on improving organizational and individual effectiveness and the administrative support of the Alcohol and Drug programs.
 - Morale, Welfare and Recreation - provides authorized appropriated fund support for shore based recreation activities.

- o Base Operations - Mission - Support for those Base Operations functions which are required in direct support of the mission of the base. For example, Fleet Training Support, Logistics Support, etc. Expenses are included for the following functions:

- Retail Supply Operations - In addition to standard supply functions, this item includes the procurement, receipt, storage and issue of bulk liquid fuel, including operating aircraft fuel servicing facilities. Additionally, waterfront operations such as handling incoming and outgoing cargo and loading/unloading live ammunition onto and from combatant vessels are included.

Activity Group: Base Operations (cont'd)

- Maintenance of Installation Equipment - provides for maintenance of major shore based equipment including: service and miscellaneous craft, construction equipment (non-deployable), weapons, electronics, electronic engineering, and fleet moorings.
- Other Base Services - provides for the maintenance and operation of vehicles/other transportation equipment, port services (includes navigational assistance to ships, operation of service craft, degaussing operations, and oil spillage cleanup).
- o Base Operations - Ownership - Support required at shore bases regardless of type of mission being performed which must be sustained to have a functioning base. Expenses are included for the following functions:
 - Other Engineering Support - Public Works Department Administration, engineering services, custodial services, refuse/garbage collection and disposal, snow removal, rental and leasing of real property, and fire protection and firefighting for Naval activities and their tenants. The sub-activity group Hazardous Waste Material Handling was consolidated into this sub-activity group and includes personnel, supplies and training associated with the identification and disposal of hazardous wastes.
 - Administration - provides support related to financial/resource management, civilian manpower management, and maintaining military personnel records.
 - Automated Data Processing - provides analysis programming, equipment rental, operations and maintenance, contractual services and supplies.
 - Audiovisual - provides supplies and services required for audiovisual support.
 - Physical Security - provides shore base physical security.

Activity Group: Base Operations (cont'd)

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout.

	FY 1987		FY 1988		FY 1989		Change FY 88/89
	FY 1987	Budget Request	FY 1988 Approp	Current Estimate	Initial Estimate	Amended Estimate	
Base Communications	43,237	48,283	39,633	40,058	40,503	37,274	-6,784
Utility Operations	208,108	231,822	221,860	209,53	239,574	225,027	15,497
Personnel Operations	124,565	127,917	119,614	109,286	142,913	127,800	18,514
Base Ops, Mission	428,095	418,557	413,495	416,228	439,959	442,220	25,992
Ownership Operations	479,129	499,849	497,050	492,899	530,628	522,669	29,770
Total Activity Group	1,283,134	1,326,428	1,291,652	1,272,001	1,393,577	1,354,990	82,989

B. Reconciliation of Increases and Decreases.

	Amount
1. FY 1988 Current Estimate	\$1,272,001
2. Pricing Adjustments	38,123
A. Annualization of FY 1988 Pay Raise	
1) Classified	(4,241)
2) Wage Board	1,736
3) Foreign National Direct	978
B. Annualization of FY 87 Wage Grade pay Adjustment	1,527
C. FY 1989 Direct Pay Raise	(32)
1) Classified	(9,326)
2) Wage Board	5,089
3) Foreign National Direct	560
D. FND Separation Liability and retroactive pay	3,677
E. Stock Fund	(-255)
1) Non-Fuel	(-3,067)
F. Industrial Fund Rates	-3,067
G. Annualization of FERS	(4,333)
H. Health Benefits	(1,003)
I. FN Indirect Pay	(353)
J. Other Pricing Adjustments	(4,611)
1) Other Purchases	(17,546)

Activity Group: Base Operations (cont'd)

-687

3. Functional Program Transfers

A. Transfers In

1) Intra-appropriation (371)
a) Authorized Accounting Activity (AAA) 299
functions from BA 7 146
b) AAA functions from BA 8 17
c) Personnel Support Activity, Naval Training Center, San Diego from BA 8 409
d) Bachelor Enlisted Quarters, Mare Island operations from BA 8

B. Transfers Out

1) Intra-appropriation (-1,558)
a) LANTFLT and PACFLT appellate leave -38
consolidated in BA 9
b) Court reporter San Diego to BA 9 -42
c) Medical clinics in Argentina, Bravdy and -658
London (UK) to BA 8
d) PACFLT exchange Civilian and Military -33
personnel with BA 9
e) Resource Management System accounting and -41
Disbursing Officer from LANTFLT to Chief of Naval Education and Training BA 8 -18
f) Stock fund material financial accounting -28
to Naval Medical Command BA 8
g) Supervisor Shipbuilding and Repair, Jacksonville civilian payroll to BA 7
h) Transfer Kenya US Liaison Office (KUSLO) communications unit to Naval Telecommunications Command to BA3 -700

4. Program Increases

A. Annualization of FY 1988 Increases 3,923
1) Annualization of CIVPERS workyears for Marine (3,923)
Guard security force replacement and physical security personnel added in FY 1988.
B. Other Program Increases in FY 1989 (2,153)
1) Increased physical security funding to better safeguard personnel and property.
1-2-85

63,253

Activity Group: Base Operations (cont'd)

2) Operational support for additional MILCON projects coming on line during the fiscal year.	(1,765)
3) Increased waterfront support associated with expansion to a 15 carrier Battle Group Navy: Pacific Fleet (3,070) and Atlantic (7,383)	(10,453)
4) Increase funding for bachelor housing and messing: operation and set up of new facilities, and personnel support equipment replacement in existing facilities.	(3,750)
5) Improve Inventory accuracy at shore facilities.	(477)
6) Full year contracting of MILPERS functions contracted out to provide MILPERS for physical security.	(12,814)
7) Increase in Hazardous Waste handling and disposal to comply with Federal, State and local regulations.	(2,770)
8) Support for peacetime use of RAF Machrihanish.	(900)
9) Increase Base Operation Support for NSA Naples.	(949)
10) Support for new ROTHER program facilities, including Amchitka.	(7,643)
11) Support for SLOW WALKER operations.	(746)
12) Increase for continued implementation of Bases and Stations Information System (BASIS) to assist base operations.	(1,870)
13) Increased support for new or expanded home-ports under the strategic homeporting initiative, including Staten Island, Pascagoula, Lake Charles, Galveston, Ingelside, Mobile and Gulfport.	(3,273)
14) Contract funding of the operation of Bachelor Housing and Enlisted dining Facilities functions.	(7,914)
15) Support for expanded NATO facilities at Santo Stefano Depot.	(237)
16) Increase to reduce backlog of overhaul and maintenance of service craft.	(1,616)

Activity Group: Base Operations (cont'd)

5. Program Decreases		-17,700
A. One-Time FY 1988 Costs		
1) FY 1988 Foreign National Indirect Hire Separation liability and retroactive pay.	-7,272	
2) Oahu Telephone System	(-3,277)	
3) DSN (Digital Subscriber Network) throughout WESTPAC area.	(-2,800)	
B. Other Decreases	(-1,195)	
1) Projected end-strength and dollar savings resulting from scheduled Efficiency Reviews.	-10,428	
2) Civilian Employment- two days less in FY 1989.	(-1,483)	
3) Reduction in energy use due to energy conservation efforts.	(-3,356)	
4) Reduction to reflect savings due to implementation of Bases and Stations Information System.	(-865)	
5) Savings associated with decisions to convert to contractor performance or reducing administrative costs resulting from A-76 CA studies.	(-55)	
6) Reduction in CIVPERS work years to meet deficit reductions goals.	(-954)	
	(-3,715)	

17. FY 1989 Amended Budget Request

\$1,354,990

Activity Group: Base Operations (cont'd)

	<u>FY 1987</u>	<u>FY 1988</u>	<u>FY 1989</u>
III. <u>Performance Criteria.</u>			
Operations of Utilities			
Total Energy Consumed(MBTU's)	24,758,278	24,548,951	24,269,916
Total Non-Energy Consumed (000 Gal)	19,884,379	20,075,924	20,331,060
Base Communications			
Number of Instruments	59,801	61,146	59,654
Number of Mainlines	29,042	38,567	37,779
Daily Average Msg Traffic	8,655	9,385	9,541
Personnel Operations			
Bachelor Housing (\$000)	28,328	27,613	35,410
No. of Officer Quarters	10,341	10,665	10,856
No. of Enlisted Quarters	90,128	93,848	94,896
Other Personnel Support (\$000)	58,436	62,184	72,200
Population Served, Total	994,782	1,054,095	1,054,436
(Military, E/S)	487,637	505,370	505,668
(Civ/Dep, E/S)	507,145	548,725	548,768
Morale, Welfare & Recreation (\$000)	37,801	19,489	20,190
Population Served, Total	1,172,506	1,182,226	1,221,631
(Military, E/S)	517,610	523,127	541,844
(Civ/Dep, E/S)	654,896	659,099	679,787
Base Operations, Mission			
Retail Supply Operations (\$000)	126,221	136,009	145,346
Line Items Carried	2,954	3,030	3,087
Receipts (000)	4,513	4,569	4,711
Issues (000)	6,809	6,978	7,252
Maintenance of Installation Equip (\$000)	71,180	72,477	75,963
Other Base Services (\$000)	230,694	207,742	220,911
No. of Motor Vehicles, Total	11,927	12,064	12,058
(Owned)	8,799	8,842	8,953
(Leased)	3,128	3,222	3,105
Ownership Operations			
Other Engineering Support (\$000)	178,045	178,225	189,543
Administration (\$000)	229,186	227,354	234,864
Number of Bases, Total	95	93	93
(CONUS)	43	41	41
(Overseas)	52	52	52

Activity Group: Base Operations (cont'd)

IV. Personnel Summary.

A. Military

Officer
Enlisted

B. Civilian

USDH
FNDH
FNH

	<u>FY 1987</u>	<u>FY 1988</u>	<u>FY1989</u>
	<u>28,695</u>	<u>28,993</u>	<u>28,861</u>
Officer	2,064	2,233	2,164
Enlisted	26,631	26,760	26,697
	<u>21,682</u>	<u>21,849</u>	<u>21,484</u>
USDH	14,478	15,034	14,704
FNDH	4,301	3,748	3,715
FNH	2,903	3,067	3,065

Department of the Navy
Operation and Maintenance, Navy

Activity Group: Foreign Currency Fluctuation
Budget Activity: II - General Purpose Forces

I. Description of Operations Financed.

This program provides resources for foreign currency exchange rate fluctuations. Operations financed include the cost of foreign currency gains or losses against the U.S. dollar. The use of this fund has been instrumental in permitting an orderly execution of the budgeted program and in preventing turbulence caused by unbudgeted increases in value of foreign currencies.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout:

	FY 1988			FY 1989		
	FY 1987	Budget Request		Initial Estimate	Change	
					Amended Estimate	Change FY 88/89
Foreign Currency	142,700	0	0	0	0	0
Total Activity Group	142,700	0	0	0	0	0

B. Reconciliation of Increases and Decreases.

1. FY 1988 Current Estimate	\$0
2. FY 1989 Amended Request	\$0
	<u>Amount</u>

SUMMARY OF REQUIREMENTS BY ACTIVITY GROUP

	FY 1987			FY 1988			FY 1989			Book- BA- Page
	Personnel E/S		O&M,N Funding	Personnel E/S		O&M,N Funding	Personnel E/S		O&M,N Funding	
	Mil	Civ		Mil	Civ		Mil	Civ		
<u>BUDGET ACTIVITY 3: INTELLIGENCE & COMMUNICATIONS</u>										
<u>Security Program</u>	8,337	4,203	386,191	9,055	4,555	384,719	9,115	4,568	405,858	3-3-7
<u>Naval Communications</u>	7,686	1,861	422,599	7,676	1,833	372,383	7,583	1,786	387,343	
Leased Communications	-	-	201,854	-	-	158,640	-	-	177,040	3-3-10
Worldwide Military										
Command & Control	439	130	21,898	473	137	19,913	461	138	22,624	3-3-17
Mgmt. Headquarters	73	165	6,971	81	165	7,003	81	165	6,700	3-3-20
Other Communications	7,174	1,566	191,876	7,122	1,531	186,827	7,041	1,483	180,979	3-3-23
<u>Specialized Support</u>	3,060	2,696	320,752	3,185	2,729	280,214	3,140	2,654	294,726	
Environmental										
Prediction Support	1,831	1,026	179,863	1,860	1,036	153,554	1,854	1,033	168,539	3-3-40
Naval Observatory	5	118	8,465	10	122	9,406	11	127	9,907	3-3-52
Maintenance of										
Real Property	64	311	29,364	66	314	24,577	65	281	24,449	3-3-58
Base Operations	1,160	1,241	103,650	1,249	1,257	92,677	1,210	1,213	91,831	3-3-62
TOTAL BA 3	19,083	8,760	1,129,542	19,916	9,117	1,037,315	19,838	9,008	1,087,927	

O&M,N
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Department of the Navy
Operation & Maintenance, Navy

Budget Activity: III - Intelligence and Communications

I. Description of Operations Financed.

This budget activity provides support to the Strategic Forces and General Purpose Forces program in the area of cryptology, general defense intelligence, foreign counterintelligence, investigative service, communications, and other specialized support such as Navy oceanographic program and base operations. All available audit savings have been incorporated into the following budget estimates.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout.

	FY 1987	FY 1988			FY 1989		Change FY 88/89
		Budget Request	Approp	Current Estimate	Initial Estimate	Change	
					Amended Estimate		
Security Programs	386,191	417,522	384,955	384,718	431,040	-25,182	21,140
Naval Communications	422,599	454,157	372,344	372,383	429,545	-42,202	14,960
Specialized Support	320,752	301,627	280,250	283,214	306,681	-11,955	14,512
Total. Budget Activity	1,129,542	1,173,306	1,037,549	1,037,315	1,167,266	-79,339	50,612

Budget Activity: III - Intelligence and Communications (continued)

B. Reconciliation of Increases and Decreases.

1. FY 1988 President's Budget Request	\$1,173,306
2. Congressional Adjustments	-135,757
A. Inflation	-27,285
B. Travel	-4,931
C. Base Operations Support	-2,971
D. Workyear Pricing	-18,973
E. Morale, Welfare, Recreation Support	-175
F. Headquarters Operations	-1,672
G. Leased Telecommunications	-1,600
H. ADP Operations	-4,484
I. Command, Control, Communications	-16,012
J. Classified Programs	-12,805
K. Savings	-33,418
L. Contractor Support Services	-5,195
M. Manpower Savings	-1,723
N. Expense/Investment Threshold	-2,605
O. Japanese Defense Contracting	-1,851
P. Student Dependent Travel	-57
3. FY 1988 Appropriation	\$1,037,549
4. Pricing Adjustments	-2,814
A. FY 1988 Pay Raise	(5,278)
(1) Classified	4,582
(2) Wage Board	141
(3) Foreign National Direct Hire	555
B. Stock Fund	(937)
(1) Fuel	937

Budget Activity: III - Intelligence and Communications (continued)

B. Reconciliation of Increases and Decreases (continued)

C. Other		
(1) Health Benefits	(-9,029)	
(2) FERS Reductions	2,168	
(3) Other	-11,103	
	-94	
		15,841
5. Other Increases		
A. Program Increases	(15,841)	
(1) Security Program	5,439	
(2) Leased Communications	1,000	
(3) Worldwide Military Command & Control System	5	
(4) Management Headquarters	130	
(5) Other Communications	5,106	
(6) Environmental/Prediction Support	2,675	
(7) Naval Observatory	100	
(8) Base Operations	686	
(9) Maintenance of Real Property	700	
		-13,261
6. Other Decreases		
A. Program Decreases	(-13,261)	
(1) Security Program	-3,088	
(2) Leased Communications	-998	
(3) Other Communications	-4,934	
(4) Environmental/Prediction Support	-2,120	
(5) Maintenance of Real Property	-789	
(6) Base Operations	-1,332	
		\$1,037,315
7. FY 1988 Current Estimate		

Budget Activity: III - Intelligence and Communications (continued)

B. Reconciliation of Increases and Decreases (continued)

8. Pricing Adjustments		51,324
A. Annualization of FY 1988 Direct Pay Raises		
(1) Classified	(1,930)	
(2) Wage Board	1,537	
(3) Foreign National Direct	172	
B. FY 1989 Direct Pay Raise	221	
(1) Classified	(5,698)	
(2) Wage Board	5,156	
(3) Foreign National Direct	174	
C. Stock Fund	568	
(1) Non-Fuel	(-3,485)	
D. Industrial Fund Rates	-3,485	
E. FN Indirect	(29,886)	
F. Other Pricing Adjustments	(434)	
(1) Health Benefits	(16,861)	
(2) Other	1,618	
9. Functional Program Transfers	15,243	385
A. Transfers In	(839)	
(1) Intra-Appropriation	839	
B. Transfers Out	(-454)	
(2) Intra-Appropriation	-454	
10. Program Increases		44,460
A. Annualization of FY 1988 Increases	(4,008)	
(1) Security Program	3,607	
(2) Leased Communications	61	
(3) Base Operations	340	
B. One-Time FY 1989 Costs	(1,943)	
(1) Environmental/Prediction Support	1,779	
(2) Naval Observatory	24	
(3) Maintenance of Real Property	140	

O&M,N
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Budget Activity: III - Intelligence and Communications (continued)

B. Reconciliation of Increases and Decreases (continued)

C. Other Program Growth in FY 1989		
(1) Security Program	(38,509)	
(2) Leased Communications	13,130	
(3) Worldwide Military Command & Control System	1,044	
(4) Other Communications	3,480	
(5) Environmental/Prediction Support	15,060	
(6) Naval Observatory	3,941	
(7) Maintenance of Real Property	480	
(8) Base Operations	956	
	418	
		-45,557
11. Program Decreases		
A. Annualization of FY 1988 Decreases		
(1) Security Program	(-1,615)	
(2) Management Headquarters	-400	
(3) Other Communications	-424	
(4) Base Operations	-691	
(5) One-Time FY 1988 Costs	-100	
(1) Security Program	(-1,155)	
(2) Leased Communications	-18	
(3) Naval Observatory	-1,000	
(4) Base Operations	-75	
(5) Other Program Decreases in FY 1989	-62	
(1) Security Program	(-42,787)	
(2) Worldwide Military Command & Control System	-5,842	
(3) Management Headquarters	-1,419	
(4) Other Communications	-86	
(5) Environmental/Prediction Support	-24,998	
(6) Naval Observatory	-3,939	
(7) Maintenance of Real Property	-239	
(8) Base Operations	-2,021	
	-4,243	
		\$1,087,927
12. FY 1989 Amended Estimate		

Department of the Navy
Operation and Maintenance, Navy
Exhibit OP-5

Activity Group: Security Program
Budget Activity: III - Intelligence & Communications

I. Description of Operations Financed.

Details of this program are classified and provided separately.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout.

	FY 1988			FY 1989			Change FY 88/89
	FY 1987	Budget	Current	Initial	Amended	Change	
		Request	Estimate	Estimate	Estimate		
Security Program	<u>386,191</u>	<u>417,522</u>	<u>384,955</u>	<u>384,718</u>	<u>431,040</u>	<u>-25,182</u>	<u>21,140</u>
Total	<u>386,191</u>	<u>417,522</u>	<u>384,955</u>	<u>384,718</u>	<u>431,040</u>	<u>-25,182</u>	<u>21,140</u>

B. Reconciliation of Increases and Decreases.

1. FY 1988 Current Estimate	\$384,718
2. Pricing Adjustments	10,782
A. Annualization of FY 1988 Direct Pay Raises	(920)
(1) Classified	853
(2) Wage Board	63
(3) Foreign National Direct	4

Activity Group: Security Program (continued)

B. Reconciliation of Increases and Decreases (continued)

B. FY 1989 Direct Pay Raise		
(1) Classified	(2,843)	
(2) Wage Board	2,750	
(3) Foreign National Direct	70	
C. Stock Fund	23	
(1) Non-Fuel	(-1,706)	
D. Industrial Fund Rates	-1,706	
E. FN Indirect	(413)	
F. Other Pricing Adjustments	(37)	
(1) Health Benefits	(8,275)	
(2) Other	600	
	7,675	
3. Functional Program Transfers		-119
A. Transfers Out	(-119)	
(1) Intra-Appropriation	-119	
4. Program Increases		16,737
A. Annualization of FY 1988 Increases	(3,607)	
B. Other Program Growth in FY 1989	(13,130)	
5. Program Decreases		-6,260
A. Annualization of FY 1988 Decreases	(-400)	
B. One-Time FY 1988 Costs	(-18)	
C. Other Program Decreases in FY 1989	(-5,842)	
6. FY 1989 Current Estimate		\$405,858

Activity Group: Security Program (continued)

III. Performance Criteria.

Details of this program are classified and provided separately.

IV. Personnel Summary.

End Strength (E/S)

A. Military

Officer
Enlisted

B. Civilian

USDH
FNDE
FNTH

	<u>FY 1987</u>	<u>FY 1988</u>	<u>FY 1989</u>
	<u>8,318</u>	<u>9,044</u>	<u>9,104</u>
	908	1,047	1,050
	8,318	9,044	9,104
	<u>4,203</u>	<u>4,555</u>	<u>4,568</u>
	4,085	4,439	4,452
	63	57	57
	55	59	59

Department of the Navy
Operation and Maintenance, Navy
Exhibit OP-5

Activity Group: Leased Communications
Budget Activity: III - Intelligence & Communications

I. Description of Operations Financed.

This activity group provides for the continuing financial support for leasing, acquisition and implementation of communications services and related systems and facilities. Approved telecommunications requirements are implemented in response to tasking from designated, validating authorities. With minor exceptions, all requirements are first reviewed by the Naval Telecommunications Command and then considered for approval by the appropriate authority. Implementation is accomplished in the most cost-effective manner possible. The submitted requirements are analyzed, evaluated and necessary amplifying information obtained as follows: ensure that requestor has properly stated the requirement; review Navy and DOD data bases and coordinate to determine the availability of uncommitted resources; ascertain status of any planned facilities which will become available within the required operational time frame; prepare recommendations, as necessary, leading to validation and subsequent programming and budgeting. All circuits, both leased and government-owned, are under periodic review with the requiring activities to determine continued need.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout.

	FY 1988			FY 1989		
	FY 1987	Budget Request		Initial Estimate	Amended Estimate	
		Approp	Current Estimate		Change	FY 88/89
Leased Communications	201,854	200,040	158,638	180,336	-3,296	18,400
Total	201,854	200,040	158,638	180,336	-3,296	18,400

OSM,N
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Activity Group: Leased Communications (continued)

B. Reconciliation of Increases and Decreases.

1. FY 1988 Current Estimate		\$158,640
2. Pricing Adjustments		18,295
A. Industrial Funds		
B. Other Pricing Adjustments	(17,697)	
(1) Other	(598)	
	598	
3. Program Increases		1,105
A. Annualization of FY 1988 Increases	(61)	
(1) Increase to fund full year cost for the Naval Strike Warfare Center.	61	
B. Other Program Growth in FY 1989	(1,044)	
(1) WASHINGTON AREA WIDEAREA SYS (WAWS) - Support the conversion of the DCS from analog to digital transmission and consolidates DCS communications in the Washington D.C. and Norfolk areas into a more coherent, efficient communications system.	400	
(2) Mediterranean Realignment - Provides leased communications support needed to achieve a balanced HF capability in the Mediterranean area.	50	
(3) LDMX/NAVCOMPARS - Supports leased maintenance charges associated with replacing single processor 70/45 LDMX's with dual processor 90/60 LDMX's.	432	
(4) Increase for LEASAT system control and support per negotiated contract schedule of payments.	162	

Activity Group: Leased Communications (continued)

B. Reconciliation of Increases and Decreases (continued)

4. Program Decreases				-1,000
A. One-Time FY 1988 Costs			(-1,000)	
(1) Decrease due to incremental funding of FY 1988 costs for GAPFILLER satellite support.			-1,000	
5. FY 1989 Amended Estimate				\$177,040

III. Performance Criteria.

1. AUTOVON

Access to and use of the unsecured direct dialing service worldwide through the system of government owned and leased automatic switching facilities of the DOD. Some of these facilities are used in support of the transmission media required by the Automatic Secure Voice Communications (AUTOSEVOCOM) Network.

2. AUTODIN

Access to and use of the single, integrated, worldwide high speed, computer-controlled, general purpose secure communications network of the DOD.

3. AUTOSEVOCOM

Access to and use of the singly approved world-wide secure voice assets of DOD.

	<u>FY 1987</u>	<u>FY 1988</u>	<u>FY 1989</u>
	58,688	65,178	77,798
	17,899	18,571	19,205
	2,340	2,431	2,514

Activity Group: Leased Communications (continued)

III. Performance Criteria (continued)

FY 1987 FY 1988 FY 1989

4. GAPFILLER

1,000 1,000 -0-

Access to and use of commercial leased satellite service pending availability of the Fleet Satellite Communications System. This system is used to provide communications between ship and shore stations.

5. LEASED SATELLITE

34,961 453 632

LEASAT replaces GAPFILLER satellites and provides more effective, reliable and survivable communications links among Navy mobile forces and between these forces and command elements ashore.

6. DEFENSE DATA NETWORK

19,089 26,050 29,540

Provides worldwide survivable and secure packet switching capability to services/agencies computer networks. The DDN provides subscribers with interactive query/response and bulk transfer capabilities plus formal message services, electronic mail, and teleconferencing services. In the post FY 1987 time frame, the DDN will support the (I-S/A AMPE) and the AUTODIN community.

7. FEDERAL TELEPHONE SERVICE (FTS)

24,032 -0- -0-

Access to and use of the capabilities of the General Services Administration (GSA) managed telephone system where AUTODIN and commercial direct distance dialing service is proved uneconomical and/or unavailable.

Activity Group: Leased Communications (continued)

III. Performance Criteria (continued)

	<u>FY 1987</u>	<u>FY 1988</u>	<u>FY 1989</u>
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8. CINCPAC VOICE ALERT NETWORK

	1,707	1,774	1,834
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A dedicated voice alert network in support of the Commander in Chief Pacific (CINCPAC). The facilities are available for use by the component commands as common user voice circuits subject to pre-emption by CINCPAC.

9. NTS Wideband Leases

	1,204	1,251	1,294
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Leased Wideband channels from which additional narrow-band channels are derived in providing transmission media for the Defense Communications Systems and the Naval Telecommunications Systems.

10. ENVIRONMENTAL DATA

	3,983	4,138	4,279
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This program package covers all circuitry used to disseminate environmental data to the operating forces of the Navy and includes the following programs:

- Navy Environmental Data Network
- Geostationary Operational Environmental Satellite
- Continental Meteorological Data Systems
- Civil and National Oceanic and Atmospheric Administration
- Weather Services
- COMNAVOCEANCOM Services

Activity Group: Leased Communications (continued)

III. Performance Criteria (continued)

FY 1987 FY 1988 FY 1989

11. VERDIN

809 841 870

This program finances interconnecting leased data facilities which permit Submarine Force Commanders to use information from Very Low Frequency (VLF) and Low Frequency (LF) transmitters.

12. ANTI-SUBMARINE WARFARE COMMAND, CONTROL AND COMMUNICATIONS SYSTEMS (ASW/CCS)

803 834 862

This program finances a system of leased and government-owned circuits which permits ASW Force Commanders to command and control forces. The system provides communications between the ASW Force Commands and other commands.

13. AUTOMATION

15,213 15,488 16,565

This program finances a series of automated message exchange terminals, their remote access equipment, supporting access lines and interface devices.

14. COMMERCIAL REFILE COMMUNICATIONS

1,810 1,714 1,772

This program finances the cost of delivery of messages by domestic and international common carriers as required for the conduct of official government business.

Activity Group: Leased Communications (continued)

III. Performance Criteria (continued)

FY 1987 FY 1988 FY 1989

15. OTHER LEASED SERVICES

18,316 18,917 19,875

This program finances other approved telecommunications circuitry and services such as: services for the Chief of Naval Operations and Commandant of the Marine Corps; an interim system interfacing intelligence and operational components of the Fleet; circuitry necessary for the execution of station missions, tasks and functions; circuitry in support of personnel accounting functions of the Chief of Naval Personnel; communication links between major commands and the National Command Authority; and, miscellaneous support programs not otherwise categorized.

Totals

201,854 158,640 177,340

IV. Personnel Summary.

N/A

Department of the Navy
Operation and Maintenance, Navy
Exhibit OP-5

Activity Group: Worldwide Military Command and Control System (WVMCCS)
Budget Activity: III - Intelligence & Communications

I. Description of Operations Financed.

The Worldwide Military Command and Control System (WVMCCS) offers the means for command and control of U.S. Military Forces. The system provides rapid, reliable and secure Automatic Data Processing (ADP) systems at and between WVMCCS nodes throughout the world. Resources for this program support WVMCCS Engineering and Installation, WVMCCS Tactical Software Development and WVMCCS Station Operations. The WVMCCS Engineering and Installation program provides funds for engineering installation plans and installation of all WVMCCS ADP and associated communications support equipment. WVMCCS Tactical software Development provides for design, development, maintenance and technical support of standard WVMCCS applications systems computer programs. The major functions of WVMCCS Station Operations are directed toward operation and maintenance of Automatic Data Processing Equipment (ADPE) to support Navy command authorities and subordinate commanders in carrying out command and control functional tasks. Included are monitoring current situations including the status of U.S. and non-U.S. forces, responding to warning and threat assessments, employing forces and executing operations plans, performing attack strike damage assessment, reconstituting and redirecting forces, and terminating hostilities and active operations.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout.

	FY 1987		FY 1988		FY 1989		Change FY 88/89
	FY 1987	Budget Request	Approp	Current Estimate	Initial Estimate	Amended Estimate	
WVMCCS	21,898	25,668	19,922	19,913	27,640	22,624	2,711
Total	21,898	25,668	19,922	19,913	27,640	22,624	2,711

O&M,N
3-17

Activity Group: Worldwide Military Command and Control System (WVMCCS) (continued)

B. Reconciliation of Increases and Decreases.

1. FY 1988 Current Estimate	\$19,913
2. Pricing Adjustments	650
A. Annualization of FY 1988 Direct Pay Raises	(26)
(1) Classified	26
B. FY 1989 Direct Pay Raise	(93)
(1) Classified	93
C. Stock Fund	(-31)
(1) Non-Fuel	-31
D. Industrial Fund Rates	(7)
E. Other Pricing Adjustments	(555)
(1) Health Benefits	60
(2) Other	495
3. Program Increases	3,480
A. Other Program Growth in FY 1989	(3,480)
(1) Funds required for maintenance of WIS equipment as well as additional costs for existing WVMCCS equipment until phase out in FY 1990.	2,298
(2) Increase in contract support for software modifications, coding, testing and documenting changes in Navy WVMCCS software standardization releases. Packages used by WVMCCS sites at CINCPAC, CINCLANT, CINCUSNAVEUR, and the Navy Command Center.	1,182
4. Program Decreases	-1,419
A. Other Program Decreases in FY 1989	(-2,419)
(1) Decrease reflects Permanent Change of Station moves due to reduction from sixteen moves in FY 1988 to two moves in FY 1989 for COMUSFORKOREA.	-223

O&M,N
3-18

Activity Group: Worldwide Military Command and Control System (WVMCCS) (continued)

B. Reconciliation of Increases and Decreases (continued)

(2) Decrease contract support in site surveys/installations of equipment and software maintenance.	-1,176
(3) Less two compensable days.	-20
5. FY 1989 Amended Estimate	\$22,624

III. Performance Criteria

Number of Installation Sites	29	18	18
Number of Installations	36	18	18
Contractor Workyears	74	65	63
Number of Terminals Supported	728	1,063	1,330
Number of Remote Sites/Terminals at Remote Sites	117/353	131/463	134/476
Number of Users	9,093	9,369	10,168
Number of Jobs	1,545,624	1,643,643	1,680,939
Number of Exercises	68	68	68

IV. Personnel Summary.

End Strength (E/S)

A. Military	439	473	461
Officer	85	80	74
Enlisted	354	393	387
B. Civilian	130	137	138
USDH	130	137	138

Department of the Navy
Operation & Maintenance, Navy
Exhibit OP-05

Activity Group: Management Headquarters
Budget Activity: III - Intelligence & Communications

I. Description of Operations Financed.

This program finances operating costs of the Headquarters, Naval Telecommunications Command consisting of military and civilian personnel who manage and direct the operation and maintenance of Naval Telecommunications. Personnel ensure that funding, manpower, and communication systems are properly provided to accomplish assigned tasking from the Chief of Naval Operations, Fleet Commanders and other governmental bodies for whom the Navy provides communications.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout.

	FY 1987			FY 1988			FY 1989		
	FY 1987	Budget Request	Approp	Current Estimate	Initial Estimate	Change	Amended Estimate	Change	FY 88/89
Telecommunications Headquarters	6,971	8,515	6,967	7,003	8,559	-1,859	6,700	-303	
Total	6,971	8,515	6,967	7,003	8,559	-1,859	6,700	-303	

Activity Group: Management Headquarters (continued)

B. Reconciliation of Increases and Decreases.

1. FY 1988 Current Estimate		\$7,003
2. Pricing Adjustments		207
A. Annualization of FY 1988 Direct Pay Raise	(33)	
(1) Classified	33	
B. FY 1989 Direct Pay Raise	(133)	
(1) Classified	133	
C. Stock Fund	(2)	
(1) Non-Fuel	2	
D. Industrial Fund Rates	(-2)	
E. Other Pricing Adjustments	(41)	
(1) Health Benefits	15	
(2) Other	26	
3. Program Decreases		-510
A. Annualization of FY 1988 Decreases	(-424)	
(1) Non-Departmental Management Headquarters Operations.	-424	
B. Other Program Decreases	(-86)	
(1) Decrease in support costs associated with reduction of 19 end strength.	-36	
(2) Less two compensable days.	-50	
4. FY 1989 Amended Estimate		\$6,700

Activity Group: Management Headquarters (continued)

III. Performance Criteria.

Cost factors are not reflective of the performance criteria for this program package. Operations performed are for the sole purpose of ensuring that funding, manpower, and communications systems are properly provided to accomplish the assigned tasking from CNO, Fleet Commanders, and other governmental bodies for whom the Navy provides communications.

IV. Personnel Summary.

	<u>FY 1987</u>	<u>FY 1988</u>	<u>FY 1989</u>
A. <u>Military</u>			
Officer	73	21	81
Enlisted	51	59	59
	22	22	22
B. <u>Civilian</u>			
	165	165	165
USDH	165	165	165

End Strength (E/S)

A. Military

Officer
Enlisted

B. Civilian

USDH

Department of the Navy
Operation and Maintenance, Navy
Exhibit OP-5

Activity Group: Other Communications

Budget Activity: III - Intelligence & Communications

I. Description of Operations Financed.

Station Operations

These funds support Naval Communications Area Master Stations, Naval Communications Stations, Naval Communications Units, and the ongoing efforts of the Naval Telecommunications Command Automation Software Program (ashore and afloat).

Equipment Installation

These installation projects provide operational commanders with reliable, secure, and rapid information transfer systems for effective command and control of the Navy. Supported in this program are Fleet Statellite Communications requirements and the Minimum Essential Emergency Communications Network (MEECN).

Communications Security

Communications Security (COMSEC) program functions include providing technical and engineering support in the development and operational evaluation of new equipment, subsystems and ancillary devices and performance of comprehensive instrumented tests (TEMPEST surveys) of shipboard and shore facilities handling classified information. COMSEC further includes maintenance, overhaul, repair and modification costs for Fleet cryptographic devices and systems. The Signals Security program encompasses six basic operations including surveillance, training, vulnerability assessment, engineering and technical services, installation and de-installation, and overhaul/refurbishment. Operations financed under Navy Communications Security Material System include management and operation of the office of the Director, management of COMSEC material, a Central Office of Record to account for all COMSEC material, and development of procedures to be used in situations where the physical security of COMSEC material has been violated.

Activity Group: Other Communications (continued)

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout.

	FY 1988		FY 1989		Change FY 88/89
	FY 1987	Budget Request	Current Estimate	Initial Estimate	
Station Operations	99,699	96,573	87,104	87,096	102,449
Equipment					
Installation	51,571	74,337	61,245	61,255	69,519
Communications					
Security	40,606	49,024	38,468	38,476	41,042
Total	191,876	219,934	186,817	186,827	213,010
					-32,031
					180,979
					-7,813

B. Reconciliation of Increases and Decreases.

1. FY 1988 Current Estimate	\$186,827
2. Pricing Adjustments	4,214
A. Annualization of FY 1988 Direct Pay Raises	
(1) Classified	(340)
(2) Wage Board	253
(3) Foreign National Direct	51
B. FY 1989 Direct Pay Raises	36
(1) Classified	(1,073)
(2) Wage Board	978
(3) Foreign National Direct	48
C. Stock Fund	47
(1) Non-Fuel	(-1,027)
	-1,027

Activity Group: Other Communications (continued)

B. Reconciliation of Increases and Decreases (continued)

D. Industrial Fund Rates	(247)	
E. FN Indirect	(68)	
F. Other Pricing Adjustments	(3,513)	
(1) Health Benefits	305	
(2) Other	3,208	
		567
3. Functional Program Transfers		
A. Transfers In	(700)	
(1) Intra-Appropriation	700	
(a) KUSLO Communications Unit.	(700)	
B. Transfers Out	(-133)	
(1) Intra-Appropriation	-133	
(a) Transfer of Guard Services to Navaï District Washington.	(-133)	
4. Program Increases		15,060
A. Other Program Growth in FY 1989	(15,060)	
(1) Extremely High Frequency (EHF) Satellite Communications -	208	
Provides for development of modest cost, widely deployable EHF		
terminals capable of providing reliable wartime, covert, jam		
resistant communications under the projected threat environment.		
Funds provide for preparation of site survey plans for Field		
Maintenance Activity (FMA), Software Support Activity (SSA),		
depot maintenance support activity and FY 1990 MILCON effort.		

Activity Group: Other Communications (continued)

B. Reconciliation of Increases and Decreases (continued)

(2) Manual Relay Center Modernization Program - MARCEMP modernizes ship to shore termination procedures used to process messages with increased speed, reliability, and accountability of message delivery. FY 1989 increase will implement two additional sites.	124
(3) AN/FRT-96 Transmitter - Replaces the 20 year old AN/FRT-39/40 transmitters with 10KW transmitters. The new transmitters are the next generation of reliable HF fleet support. Increase represents seven additional sites.	1,097
(4) SURTASS HF - Provides communications equipment at selected communications stations to support the deployment of TACOS ships.	3
(5) HF Chirpsounder - Provides an ionospheric sensing device to provide more reliable communications, especially when HF propagation is uncertain, by determining which frequencies are optimum for transmission between two points. Increase represents installation starts at two sites.	85
(6) Upgrades, Relocations, and Expansions - Program provides engineering design, technical support relocation/installation of equipment, and as-built drawings to ensure efficient and effective message processing at the Navy shore telecommunication sites. Increase reflects implementation of one additional site.	316
(7) DCS TCIP (Manual and Joint) - A continuing program to upgrade manual technical control facilities within Shore Naval Telecommunications Systems to ensure compatibility and interoperability between the DCS digital upgrade programs. Increase represents installation to one additional site.	268

O&M,N
3-26

Activity Group: Other Communications (continued)

B. Reconciliation of Increases and Decreases (continued)

- | | |
|--|-------|
| (8) Northern UK Communications - Project installs six additional AN/FRC-17Xs and four shelters to house these radios and other equipment as part of the conversion of an obsolete analog microwave in the Northern UK to a digital operation with bulk encryption. Increase supports installation start. | 121 |
| (9) Electro-Magnetic Pulse (EMP) Hardening PACOM C3 Program - Provides EMP survivability and connectivity throughout PACOM for top priority strategic communications circuits. These systems identified in the Pacific area must be protected against upsets or destruction from an EMP event. Increase supports additional installation effort in FY 1989. | 143 |
| (10) NAVMACS V5 - Provides System Improvement Testing and maintenance on existing NAVMACS software and necessary change documentation. | 8 |
| (11) High Frequency Antenna Replacement Program Replacement Program - Provides new antennas to replace existing inefficient, obsolete, and cost prohibitive or impossible to maintain antennas (no spare parts for obsolete antennas with supportable efficient antennas). FY 1989 increase will continue installation at NCS NAVCAMSLANT, NCS H.E. Holt and NAVCAMSEASTPAC, and begin installation at 10 new sites. | 1,317 |
| (12) AN/FRT-80 Transmitter Rehab Program - Corrects defects in the AN/FRT-80 series HF transmitters by installing new exciters, and extends the life of the equipment until new transmitters are available. Increase provides upgrades at 4 additional sites. | 119 |
| (13) TTY Replacement - Provides a new teletypewriter for ships and shore users to replace the outdated model 28 teletypewriters. FY 1989 funds complete installation design and site preparation for installation at the fleet training centers and selected NCS shore sites. | 35 |

0&M,N
3-27

Activity Group: Other Communications (continued)

B. Reconciliation of Increases and Decreases (continued)

- | | |
|--|-----|
| (14) MARDEZ - A joint Navy/Coast Guard program to provide effective communications during an emergency. Increase represents new program start. | 147 |
| (15) Puget Sound Communications Upgrade Project - Enhances communications capabilities at NCS Puget Sound to correct deficiencies to enable the station to meet its expanded technical control and circuit coordination responsibilities. Represents a new effort in FY 1989. | 95 |
| (16) DCS Voice Orderwire (VOW) Program - Provides for the installation of previously procured orderwire communications terminal equipment required to implement the standardized worldwide DCS orderwire network. Increase is to complete projects begun in FY 1988. | 108 |
| (17) Transmission Monitoring and Control (TRAMCOM) - Provides the capability to supervise and direct terrestrial transmission media from a central location and effect necessary modifications. Increase provides for equipment installation at the Philippines. | 36 |
| (18) Defense Data Network (DDN) Program - Provides DOD with cost effective, survivable and secure packet switching services for ADP and Rework communications. FY 1989 funds provide site surveys at unclassified and classified nodes and installation of cryptographic equipments at classified nodes. Increase provides for installation at 3 additional sites. | 202 |
| (19) Increase in Minimal Essential Emergency Communications Network (MEECN) laboratory workyear efforts required for implementation of ISAPS. | 10 |

Activity Group: Other Communications (continued)

B. Reconciliation of Increases and Decreases (continued)

(20) Telecommunication Outfitting - Increase in spare parts requirements.	213
(21) Advanced Narrowband Digital Voice Terminal - Represents an increase of 55 shore installations to meet a total goal of 395 Navy-wide installations by FY 1993.	1,500
(22) Technical Control Improvement Plan (TCIP) - Provides funds for operation of additional equipment for technical control functions worldwide.	45
(23) Low Speed Time Division Multiplex (LSTDM) - Funds will support digital terminals for Navy communications trunks worldwide.	65
(24) Defense Switch Network - Europe (DSN-EUR) - Provide funds for contract maintenance for additional replacement switches.	2,712
(25) Maritime Defense Zones (MDZ) - Funds will provide communications support for MDZ Pacific.	190
(26) Automation Ashore: Phased adjustment to software support for for automation (LDMX/NAVCOMPARS).	1,839
(27) Antenna Maintenance: Replace VLF ground screen at NAVRADSTA Jim Creek.	1,017
(28) HF Regency Net - Provide funds assessed as Navy's portion to operate DOD Theatre Nuclear Force Communications System HF Regency in the European area.	368
(29) Contract Operations - Provides for cost increases and DOL wage determinations, over and above prescribed inflation rate, for contract operation and maintenance of selected CONUS and overseas sites.	900

Activity Group: Other Communications (continued)

B. Reconciliation of Increases and Decreases (continued)

(30) Increase for 24-hour FEP operations in support of additional sea/air/land terminals.	1,769
	-25,689
5. Program Decreases	
A. Annualization of FY 1988 Decreases	(-691)
(1) Annualization of dollar savings resulting from scheduled FY 1988 Efficiency Reviews.	-351
(2) Annualization of FY 1988 reduction in contract advisory and assistance services resulting from intense management review.	-340
B. Other Program Decreases in FY 1989	(-24,998)
(1) Radio Direction Finding (RDF) Communications - Provides for the Ultra High Frequency (UHF) satellite exchange of Special Intelligence (SI) data to support ships equipped with RDF systems. Decrease reflects the stretch cut of RDF and TACINTEL systems installations and reduced monitoring and control of fleet assets.	-1,288
(2) Reduction of Naval Communications Station operations end/strength.	-187
(3) Demand Assigned Multiple Access (DAMA) - Provides for installation of multiplexer systems and phased integration of baseband systems. FY 1989 decrease reflects reduced requirements for shipboard installation support for the TD-1271 and indefinite delay of Front End Computer Processor test checkout and installation.	-2,055

Activity Group: Other Communications (continued)

B. Reconciliation of Increases and Decreases (continued)

-1,959

- (4) Super High Frequency (SHF) Shore Terminals - Provides high data rate transfer for SURTASS data to shore processors. Decrease reflects fewer SURTASS upgrades in FY 1989 and reduction of High Altitude Electromagnetic Pulse Hardening and test efforts.

-1,274

- (5) NAVSTAR Global Position System (GPS) - Provides continuous world-wide three-dimensional positioning capability to the operational forces. User equipment will be installed aboard over 7,000 platforms (aircraft, ships, submarines and land based platforms). Decrease reflects reductions in pre-installation test and checkout, maintenance and repair efforts.

-2,311

- (6) Battle Group Satellite Communications (SATCOM) - Provides installation and maintenance of UHF SATCOM systems which support the exchange of command and control traffic, over-the-horizon targeting data between major combatants, command ships, attack submarines and selected shore sites; and SATCOM support provides UHF SATCOM capabilities for all surface ships, submarines, selected shore sites and special applications (e.g., mobile vans, portable man packs). Decrease reflects the deferral of vulnerability modifications and reduced level of monitoring and controlling of SATCOM assets for the fleet.

-1,063

- (7) Local Digital Message Exchange (LDMX) - Provides automated message preparation, routing and logging to large volume Navy sites. The LDMX interfaces with AUTODIN and the Navy's tactical message exchange systems. Decrease reflects FY 1988 completion of equipment installation at NSC Puerto Rico, NTCC North Island and fewer designs and site preps.

Activity Group: Other Communications (continued)

B. Reconciliation of Increases and Decreases (continued)

- | | |
|--|--------|
| (8) Remote Automated Terminals/Standard Remote Terminals/Remote Informational Exchange Terminals (RAT/SRT/RIXT) - Programs Upgrades and standardizes the Navy's shore terminals which interface/integrate with AUTODIN. Decrease reflects the installation of 8 fewer upgrade packages and minor cost variations due to the uniqueness of each upgrade installation. | -276 |
| (9) Submarine Satellite Communications - Decrease reflects reduction of Special Intelligence Submarine Satellite Information Exchange Subsystems, Submarine Satellite Information Exchange Subsystems and Arctic Comms fleet support and delay of Arctic Comms installation and pre-installation testing. | -1,027 |
| (10) Van Communication Systems - Ashore Mobile Contingency Communications (AMCC) vans provide FLTICINS with a mobile tactical communications capability for emergency deployment. FY 1989 reduces funding to provide minimum level AMCC Van support. | -215 |
| (11) Mediterranean Ship/Shore Program - Realigns the High Frequency communications in the Mediterranean area to provide a cohesive, supportable, and reliable communications system. Includes antenna transmitter, and receiver upgrades. Decrease reflects reduction in installation and as-built drawings for the Med S/S program. | -11 |
| (12) NCS Jacksonville Communications Upgrade - Replaces obsolete HF communications antennas and tech control equipment. FY 1989 decrease represents one less location installation. | -103 |

Activity Group: Other Communications (continued)

3. Reconciliation of Increases and Decreases (continued)

- | | |
|--|------|
| (13) NCU Sigonella Communications Upgrade - Corrects HF shortfalls at Sigonella and is an essential element in the Mediterranean communications realignment plan. FY 1988 funds complete the project. | -445 |
| (14) NCS London Communications Upgrade - Provides increases and expanded capability for CNE and Subordinate commander. Decrease reflects completion of upgrade in FY 1988. | -883 |
| (15) NAVCAMS WESTPAC Communications Upgrade - Provides technical facilities and operational spaces for the telecommunications requirements at NCS Guam. Decrease represents completed equipment installation in FY 1988. | -133 |
| (16) NCS Iceland Communications Upgrade - Provides for the semi-hardened NAVCOMSTA complex to meet increased requirements of the NATO Combined Operations Center (COC). Decrease reflects completion of site preparation in FY 1988. | -71 |
| (17) Timing and Synchronization Program - Times the synchronous DCS transmissions necessary for the proper operation of the digital DCS. It provides Master station timing sources for all stations having digital capabilities. A lack of timing and synchronization would adversely affect the DSN, DDN, and DRAMA Systems. These systems will not interoperate without timing and synchronization. FY 1989 funds provide Master Station timing sources in conjunction with the Digital Conversion, LSTDM, and DCS VOW programs, including future installations at NAVCAMS MED, Diego Garcia, Stockton, and San Diego. Decrease reflects upgrade of one less site. | -69 |

Activity Group: Other Communications (continued)

B. Reconciliation of Increases and Decreases (continued)

-381

- (18) Spacecraft Satellite Communications (SATCOM) Support - Provides logistic support of Leased Satellite (LEASAT) GFE, analyzing Fleet Satellite Communications (FLTSATCOM) on-orbit anomalies and support of the qualification model spacecraft used as a diagnostic tool for emulating orbital problems; and planning, preparation and documentation in support of the Ultra High Frequency (UHF) Follow-on program for contract award, contract monitoring and program oversight. Decrease reflects reductions in Spacecraft Satellite Communication (SATCOM) program support for UHF Follow-On program.

-15

- (19) Navy Automated Message Reproduction and Distribution System (NAMRADS) - NAMRADS is an on-line, programmable system that interfaces directly with NAVCOMPARS/LDMX/RIXT to provide fully automated message reproduction and distribution. Decrease represents completion of FY 1988 effort.

-643

- (20) Digital Conversion Worldwide (DRAMA) Program - Provides upgrade of microwave systems in support of the Worldwide Military Command Systems, Unified/Specified/Component Commanders and Navy tactical communications requirements in conjunction with the overall DCS strategy of conversion of the DCS to an all digital transmission medium. FY 1989 funds provide installation of DRAMA equipment at NAVCAMS MED and Northern UK. Decrease reflects installation reduction at one major site.

-69

- (21) Low Speed Time Division Multiplex (LSTDM) Program - Replaces outdated Voice Frequency Carrier Telegraph equipment with high rate, supportable digital equipment. The FY 1989 funds provide LSTDM installations at 3 communication stations receiving the DRAMA, Timing and Synchronization, and VOW installations. Decrease represents a reduction in installations of one site.

Activity Group: Other Communications (continued)

B. Reconciliation of Increases and Decreases (continued)

- | | |
|---|--------|
| (22) Regency Net - Provides Navy fair share costs for the Navy's portion of DCS communication activities worldwide. Decrease reflects a reduction in engineering design for Pacific sites. | -64 |
| (23) Secure Voice Interoperability System - Represents a reduction of 40 sites plus installations being performed in large activities, i.e., Pentagon, Crystal City, large bases, where the geographical location is confined and 200-300 STU-III's can be installed at one time, which has resulted in a lower installation cost, versus installations in FY 1987/88 that were 1-2 STU-III's in sites worldwide. Decrease also reflects a reduction of 3 Radio Wireline Interface Sites. | -3,401 |
| (24) Cryptographic Repair Maintenance Support - Represents a reduction of 5 man/years of technical support effort required for SAS software support due to fewer SAS installations. | -345 |
| (25) Advance Narrowband Digital Voice Terminal (ANDVT) - The reduction in FY 1989 reflects transition of the SSA and Depot support operations from the implementation phase to the operating phase. Facilities and equipment will be in place and rendering the planned support to the joint service ANDVT program. | -207 |
| (26) NCU Key West Communications Upgrade - Replaces obsolete HF antennas and technical control equipment with supportable and efficient equipment. Decrease represents FY 1988 completion of equipment installation. | -140 |

Activity Group: Other Communications (continued)

B. Reconciliation of Increases and Decreases (continued)

- | | |
|---|--------|
| (27) KG-84 - In FY 1989, installations are scheduled at the smaller Navy communications sites. These sites require an average of 8-25 equipments per site. As a result, each installation can be accomplished for less than the major sites, since material and building modification costs are lower. Also, as a result of the decrease, there will be a reduction of 400 installations. | -4,467 |
| (28) Inter-American Naval Telecommunications Network (IANVN) - This upgrade involves site surveys and installation of communications equipment which provides for a mutual exchange of communications between navies of the U.S., South and Central America. Equipment sites include AN/FRT-96 transmitters, AN/URR-79 receivers, AN/UGC-143 teletype, and AN/URA-17 data converters. FY 1989 funding indicates FY 1988 completion. | -1,145 |
| (29) DCS Technical Evaluation Program (TEP) - This project provides necessary resources for two Navy technical wideband (WBTEP) evaluation teams, NAVELEXCEN Portsmouth and NEEACTPAC Pearl Harbor. These teams test and evaluate the DCS government-owned transmission systems. Periodic technical evaluations are conducted in support of the DCS at the time of system activation, when significant modifications have been made, or when performance data indicates the need. Decrease represents minimum level of support. | -110 |
| (30) Digital Patch and Access Systems (DPAS) - Provides for the assignment and redistribution of circuits within the DCS. Navy participation in this tri-service project is essential. Decrease reflects near completion of engineering design for six Navy operated DCS locations. | -29 |

Activity Group: Other Communications (continued)

B. Reconciliation of Increases and Decreases (continued)

- | | |
|---|------|
| (31) AUTOVON Network - Provides a telecommunications system with end-to-end common user and dedicated telephone service for the DOD. Decrease results from design completion in FY 1988. | -155 |
| (32) NATO Interconnect - Provides for engineering and design evaluation to assure interoperability of applicable US/NATO systems. Decrease reflects completion of the project in FY 1988. | -101 |
| (33) NATO Interoperability - Provides for engineering and design evaluation to assure interoperability of applicable US/NATO systems. Decrease reflects reduction in minor scope variations in determining the interoperability of new systems. | -69 |
| (34) Less two compensable days. | -287 |

\$180,979

6. FY 1989 Amended Estimate

III. Performance Criteria.

Station Operations (\$000)

Naval Communications Area Master Stations	30,222	26,321	29,117
Naval Communications Stations	31,877	27,762	30,701
Naval Communications Units	10,664	9,287	10,270
Naval Communications Supporting Program	21,167	18,435	20,376
Satellite Tracking, Telemetry and Control	5,769	5,291	7,256
Total	99,699	87,096	97,720

Activity Group: Other Communications (continued)

III. Performance Criteria (continued)

Equipment Installation (\$000)

Satellite Communications
 Naval and Long-Haul Communications
 Minimum Essential Emergency Communications Network
 Outfitting

Total

Communications Security (COMSEC) (\$000)

Security Standards and Assessment
 (TEMPEST Survey & Non-Survey)
 COMSEC Tech. Support (COMSEC Engineering)
 COMSEC Engineering and Installation
 Cryptographic Repair: Depot Maintenance

Total Primary COMSEC

Total Signal Security

TEMPEST Field Survey Program

Number of Surveys requested
 Number of Surveys accomplished
 Previous FY year end backlog
 Number of Surveys deleted*
 Net backlog at year end

*Surveys deleted are due to facility closures, equipment reconfigurations or relocations, changes in classification of information being processed, etc., resulting in the surveys no longer being required and therefore purged from the backlog.

FY 1987 FY 1988 FY 1989

28,615 45,092 36,307
 21,337 14,724 13,110
 548 529 546
 1,071 910 1,032
 51,571 61,255 50,955

3,771 3,800 3,800
 2,798 3,000 3,000
 21,798 19,129 12,900
 10,000 10,000 10,000
 38,367 35,929 29,700
 2,239 2,547 2,564

No. of Surveys

375 390 400
 -176 -200 -214
 578 712 837
 -65 -65 -65
 712 837 958

Activity Group: Other Communications (continued)

IV. Personnel Summary.

End Strength (E/S)

A. Military

Officer
Enlisted

B. Civilian

USDH
FNDH
FNTH

<u>FY 1987</u>	<u>FY 1988</u>	<u>FY 1989</u>
7,174	7,122	7,041
351	256	249
6,823	6,866	6,792
<u>1,566</u>	<u>1,531</u>	<u>1,483</u>
1,438	1,399	1,368
92	96	79
36	36	36

Department of the Navy
Operation and Maintenance, Navy
Exhibit OP-05

Activity Group: Environmental/Prediction Support
Budget Activity: III - Intelligence and Communications

I. Description of Operations Financed.

Environmental/Prediction support is provided for programs under Strategic Systems, Tactical and Surveillance Systems, Navigation and Charting, and Command and Control. This support requires the collection and processing of ocean environmental data and the provision of specific products to satisfy: (a) Chief of Naval Operations (CNO) and Defense Mapping Agency (DMA) requirements; (b) CNO, Fleet and Systems Command requirements for Naval air, surface and sub-surface (SSN) operations; (c) DMA requirements for Unified and Specified Command nautical chart deficiencies; and to provide general meteorological and oceanographic services to the Navy.

Environmental surveys are conducted from 12 ships operated by the Military Sealift Command and 3 aircraft operated by Oceanographic Development Squadron EIGHT.

A. Operations in Support of Strategic Systems - Details are classified.

B. Operations in Support of Tactical and Surveillance Systems - Oceanographic and geophysical data which influence the performance of active and passive sensor and weapon systems are collected over broad ocean areas to: (1) assist in placement and installation of acoustic arrays and cables for the underwater surveillance network; (2) optimize the Anti-Submarine Warfare (ASW) sea control mission (including offensive and defensive mining and mine countermeasures); and (3) identify the effects that discontinuity areas (fronts and eddies) have on fixed and mobile ASW systems in regard to ASW/USW tactics. Products include computer assisted ASW prediction products, Planning Guides, Area Environmental Assessment, Mine Warfare Pilots and inputs to Fleet tactical manuals and sonar operating doctrine.

Activity Group: Environmental/Prediction Support (continued)

I. Description of Operations Financed (continued)

C. Operations in Support of Navigation and Charting - (1) Hydrography. Hydrographic data are collected in nearshore areas to support the production of coastal, combat, approach, harbor and special purpose nautical charts to address DMA requirements. The data are principally collected from two coastal survey ships. Additional data are collected through commercial contracting, national and international cooperative surveys (National Ocean Survey and the Hydrographic Cooperative Program [HYCOOP]). (2) Magnetics. A specially configured aircraft is used to measure the earth's magnetic field. The collected magnetic data is the primary input for development of the United States World Magnetic Model and is incorporated by DMA onto world charts.

D. Operations in Support of Command and Control - This activity group encompasses resources for the operation of 74 activities located throughout the world. These include: the Fleet Numerical Oceanography Center, Monterey, CA with over 200 employees - it provides general and tailored acoustic and meteorological forecasts to Fleet Commands and individual operating units - serves as the major processing center for all meteorological data collected worldwide - provides this processed data and data fields to regional centers; five major regional centers with Areas of Responsibility (AOR) for the Arctic, Pacific, Atlantic, Eastern Pacific/Indian Ocean and Mediterranean, respectively, one Facility responsible for centralized meteorological equipment management and management of supporting Reserve units; and 63 smaller activities which provide daily on-scene meteorological and oceanographic forecast support. Included also are resources for major computer operations, communications, expendable oceanographic and meteorological sensors, etc., all of which support Navy's worldwide oceanographic/meteorological forecast requirements.

E. Aircraft Support Operations - Aircraft Operations for Environmental/Prediction Support are provided by (1) Oceanographic Development Squadron Eight (VXN-8) for collection of Tactical and Surveillance data and by (2) two helicopters assigned to two large coastal survey ships (AGS's) for collection of Navigation and Charting data. Operations financed in this program include costs for aircraft fuel, maintenance, and TAD in support of aircraft assigned.

Activity Group: Environmental/Prediction Support (continued)

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout.

	FY 1988			FY 1989		
	FY 1987	Budget Request	Approp	Current Estimate	Initial Estimate	Change
Strategic Systems	57,484	55,991	53,189	47,073	58,298	-3,005
Tactical and Surveillance	65,917	49,814	44,160	56,527	52,420	7,298
Navigation and Charting	28,509	29,852	27,699	22,287	30,254	-4,436
Command and Control	22,834	23,933	23,638	23,006	25,402	-1,959
Aircraft Support	5,119	4,872	4,872	4,661	4,860	-593
Total	179,863	164,462	153,558	153,554	171,234	-2,695
					168,539	14,985

B. Reconciliation of Increases and Decreases

1. FY 1988 Current Estimate	\$153,554
2. Pricing Adjustments	13,204
A. Annualization of FY 1988 Direct Pay Raise	(257)
(1) Classified	257
B. FY 1989 Direct Pay Raise	(782)
(1) Classified	780
(2) Wage Board	2
C. Stock Fund	(-491)
(1) Non-fuel	-491
D. Industrial Fund Rates	(10,867)
E. Other Pricing Adjustments	(1,789)
(1) Health Benefits	42
(2) Other	1,236

C&M,N
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Activity Group: Environmental/Prediction Support (continued)

B. Reconciliation of Increases and Decreases (continued)

3. Program Increases	5,720
A. One-Time FY 1989 Costs	(1,779)
(1) GPS navigation receivers are scheduled for installation on-board six survey vessels (3 T-ACS; 3 T-AGOR). Cost estimates relate to installation/system check out and initial operator training.	179
(2) In response to DMA requirements for enhancing hydrographic data collection rates and capabilities, airborne hydrographic surveys from a fixed wing aircraft will be initiated in FY 1989. Startup costs include installation of airborne sensing systems and minor modifications to the existing RP-3D aircraft.	1600
B. Other Program Growth in FY 1989	(3,941)
(1) With the advent of the Global Positioning System, improved navigation and positioning information will be available for incorporation into bathymetric survey data products. Additional resources will be required to integrate GPS data into existing navigation, positioning and survey data sets.	336
(2) An expansion of efforts to upgrade automatic data processing software and hardware protocol configurations in response to the Defense Mapping Agency digital data and chart product initiatives is planned for FY 1989.	1,402

Activity Group: Environmental/Prediction Support (continued)

E. Reconciliation of Increases and Decreases (continued)

- | | |
|--|-----|
| (3) A Class VII Large Scale supercomputer is being procured within the FY 1988 Computer Acquisition Program for installation at the Naval Oceanographic Office, Bay St. Louis, MS. This supercomputer will be used for dynamic ocean and ice modeling to support worldwide Naval Operations. Associated FY 1989 costs include contract operations, hardware maintenance and required networking. | 445 |
| (4) Expansion of Anti-Submarine Warfare acoustic performance performance prediction support products such as Performance Prediction Rosette charts, Bottom Transmission Loss Models, Acoustic Data Bases and Sound Propagation Models in response to fleet requirements for accurate means of predicting weapon system and sensor performance. | 102 |
| (5) An investment of additional ADP resources is planned in FY 1989 so as to improve short term efficiency of operations and long-term posture for hardware independence. Major increases include the inclusion of new and/or smaller ADP systems within a contract maintenance agreement, and the review, documentation, and inventory of existing applications software sets. | 305 |
| (6) Expansion/improvement of the capabilities of the Primary Environmental Processing System. This effort is directed toward providing the Navy with three capabilities: (a) expeditious processing and analysis of meteorological/oceanographic data to describe the total naval operating environment, (b) prediction of meteorological and oceanographic conditions to accuracies required by weapons/sensor systems, and (c) preparation, dissemination and display of platform and weapons system/sensor performance prediction based upon forecast environmental conditions. | 242 |

Activity Group: Environmental/Prediction Support (continued)

B. Reconciliation of Increases and Decreases (continued)

- | | |
|---|-----|
| (7) Maintenance and associated support costs for operation of the Naval Environmental Data Network Oceanographic Data Distribution System which will be installed at regional Oceanographic Centers. | 280 |
| (8) Maintenance and support costs associated with Aviation Support Display Stations which will be installed at CONUS Oceanographic Support Detachments. | 183 |
| (9) A net increase in the number of operating days for the Oceanographic survey fleet based on full year operation of USNS MAURY and USNS TANNER as replacement Ocean Survey Program Vessels and retirement/disposal of USNS Dutton. | 203 |
| (10) In an effort to better exploit available environmental satellite data to support Naval Operations, an upgrade of the Satellite Processing Center at FLENUMOCEANCEN is planned. Available satellite data (received both directly from environmental satellites and through the shared meteorological satellite data communications network) contain higher data transmission rates, increases in resolution and types of remotely-sensed data required to improve the representation from which ocean/atmosphere analyses and predictions evolve. | 443 |

Activity Group: Environmental/Prediction Support (continued)

B. Reconciliation of Increases and Decreases (continued)

4. Program Decreases	-3,939
B. Other Program Decreases in FY 1989	(-3,939)
(1) Two less compensable workdays.	-340
(2) Reduced funding for the production of oceanographic inputs to Special Operations Intelligence Folders.	-99
(3) Termination of lease arrangements with NOAA for use of NOAA DISCOVER as an interim replacement for USNS BOWDITCH.	-1,467
(4) Savings resulting from the lease-to-purchase conversion of meteorological facsimile equipment used at CONUS Oceanographic Support Facilities and Detachments.	-343
(5) A reduction in planned equipment purchases and interfaces for environmental support systems used on aviation combatants and shore based Oceanographic Activities.	-1,620
(6) Decreased number of flying hours in support of Environmental/Prediction Support.	-70
5. FY 1989 Amended Estimate	\$168,539

Activity Group: Environmental/Prediction Support (continued)

III. Performance Criteria and Evaluation.

Description	Unit of Measure	FY 1987	FY 1988	FY 1989
Surveys: Bathymetric Gravity	LNM	278,000	310,000	395,000
Bathymetric Planning	LNM	292,000	338,000	423,000
Navigation Chart Manuscripts	Number	48	48	48
Precise Bathymetric Nav. Zone Charts	No. of Charts	240	240	240
Vertical Deflect Data Pts	Number	157,400	102,000	102,000
Vertical Deflect Square Miles	Number	1,800,000	1,600,000	1,800,000
ASW Bottom Mapping	No. Ship Months	16	18	18
ASW Bottom Mapping	LNM	30,000	35,000	40,000
ASW Bottom Mapping	No. Survey Manuscripts	45	40	45
Hydrographic Surveys	Names of Areas	Indonesia	Indonesia	Indonesia
Hydrographic Surveys	Names of Areas	Somalia	E. Africa	N. Africa
Hydrographic Surveys	Names of Areas	E. Africa	Diego Garcia	Mid East
Hydrographic Surveys	Names of Areas	Honduras	North Atlantic	Somalia
Hydrographic Surveys	Names of Areas	Korea	Korea	Korea
Hydrographic Surveys	Names of Areas	Latin America	Latin America	Latin America
Hydrographic Surveys	Soundings (000's)	170	170	170
Hydrographic Survey Alter.	Soundings (000's)	50	50	50
Hydrographic Cooperative Program	Soundings (000's)	390	420	460
Airborne Hydrographic Surveys	Soundings (000's)	0	0	600
Hydrographic Surveys	LNM	66,000	68,000	100,000
Magnetic Surveys	LNM	465,000	440,000	16,300,000

Activity Group: Environmental/Prediction Support (continued)

III. Performance Criteria and Evaluation (continued)

<u>Description</u>	<u>Unit of Measure</u>	<u>FY 1987</u>	<u>FY 1988</u>	<u>FY 1989</u>
<u>OBSERVATIONS</u>				
Surface Weather				
Observations	No. Taken	452,870	454,226	463,768
Upper Air Observations	No. Taken	8,805	9,265	9,410
Ice Observations	No. Taken	3,130	3,780	3,780
<u>ANALYSIS AND FORECASTS</u>				
Local Forecasts/Warnings	No. Issued	96,366	99,381	100,453
Terminal Aviation				
Forecasts	No. Issued	72,903	72,903	72,903
Radiological Fallout				
Forecasts	No. Requests	2,275	2,486	2,588
Ocean Area Forecasts				
Warnings (Winds/Seas)	No. Issued	29,201	29,854	30,104
Ice Forecasts	No. Issued	1,675	1,750	1,800
Satellite Nephanalysis	No. Issued	3,000	3,000	3,000
Satellite Ocean Thermal				
Front	No. Issued	762	787	787
Satellite Tropical				
Alerts/Bulletins	No. Issued	685	685	685
<u>DISSEMINATION</u>				
Optimum Tracking Ship				
Routing	No. Ship Days	19,018	19,409	19,942
Meteorology	No. Ship Days	45,055	45,055	45,055
Ocean Acoustics	No. Requests	93,578	98,702	105,125
Refractive Index	No. Requests	28,654	32,917	34,022
Electro-Optics (Infra-Red)	No. Requests	16,751	17,195	18,096
Ballistic/Densities	No. Requests	5,305	5,623	6,042
Sound Focus	No. Requests	17,747	18,634	18,919
Computer Flight Plans	No. Requests	149,711	166,902	180,294
Staff Briefings	No. Given	11,100	12,595	13,017

Activity Group: Environmental/Prediction Support (continued)

III. Performance Criteria and Evaluation (continued)

<u>Description</u>	<u>Unit of Measure</u>	<u>FY 1987</u>	<u>FY 1988</u>	<u>FY 1989</u>
Training/Coordination				
Visits	No. Made	5,278	5,902	6,037
DD 175-1	No. Requests	272,853	283,896	293,108
Ice Routings	No. Issued	12	15	18
Flight Packets	No. Issued	54,221	59,222	63,144
Climate/Astronomical				
Data Packets	No. Issued	57,860	57,800	57,800
Meteorological and				
Oceanographic Equipment				
Assist Visits	No. Visits Made	156	156	156
Ship WX Packets	No. Issued	1,800	1,800	1,800
Anti-Submarine Warfare				
Equipment Plan Packets	No. Issued	750	750	750
VRF Flight Briefs	No. Given	1,800	1,800	1,800
Flight Training Pre-Briefs	No. Given	25,800	35,160	35,160
Metro/Telephone Briefings/				
WX Vision Displays	No. Given	14,800	15,000	15,000
Tactical Analysis &	No. Contributions			
Applications	to Naval Tactical Pub.	3	3	3
Tactical Analysis &	No. Fleet Exercises			
Applications	Supported	5	5	5
Tactical Analysis &				
Applications Reports	No. Reconstruction	4	4	4
Tactical Analysis	No. Ocean Front and/or			
Applications	Satellite Reports	6	8	8
On-Scene Environmental	No. Prediction			
Systems	Products	10	12	12
On-Scene Environmental				
Systems	No. CFMPL Products	25	30	30
On-Scene Environmental	No. On-Scene Systems			
Systems	Sites Visited	30	32	32

Activity Group: Environmental/Prediction Support (continued)

III. Performance Criteria and Evaluation (continued)

<u>Description</u>	<u>Unit of Measure</u>	<u>FY 1987</u>	<u>FY 1988</u>	<u>FY 1989</u>
On-Scene Environmental Systems	No. On-Scene System Documents	24	26	27
ASW Tactical System	No. Frontal/Acoustic Studies	3/3	3/3	3/3
ASW Surveillance Support	No. ALWT Area Surveys/Reports	3/3	3/3	4/3
ASW Surveillance Support	No. ANUG Products	10	12	12
ASW Prediction Support	No. Straits Studies	3	4	4
ASW Prediction Support	No. Array Charac. Charts/Reports	20/2	22/2	22/2
ASW Prediction Support	No. ASW Prediction Reports/Charts	1/2	1/3	2/4
ASW Prediction Support	No. BLUG Products	30	40	44
ASW Prediction Support	ADP Data Base Sup/Update	1	1	1
ASW Prediction Support	Sonar Acoustic Response Grids	3	3	3
ASW Prediction Support	Submarine Support	1	1	1
Environmental Description	No. Environmental Guides	3	4	4
Environmental Description	No. Oceanographic & Geophysical Data	3	3	3
Ocean Measurements Program	No. Submarine Oceanographic Ref. Manuals	3	5	5
Ocean Measurements Program	No. Survey Ship Mos/Aircraft Hrs	0/400	3/400	4/400
Ocean Measurements Program	No. Physical Ocean. & Biological Reports	15	22	22
Surveillance System Support	No. Environmental Data Reports	2	2	2
Mine Warfare System	No. CAPTOR Guides	2	2	2
Mine Warfare System	No. M/W Pilots	6	6	6
Mine Warfare System	No. M/W Reports	9	9	9
Mine Warfare System	SOIF Studies	12	20	18
Naval Exercise Areas	No. Data Reports/Charts	2/10	3/11	3/11
Naval Exercise Areas	No. Sites Surveyed	10	8	8

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Activity Group: Environmental/Prediction Support (continued)

III. Performance Criteria (continued)

<u>Description</u>	<u>Unit of Measure</u>	<u>FY 1987</u>	<u>FY 1988</u>	<u>FY 1989</u>
Oceanographic Data in Submarine Transit Area (ODISTA)	No. Areas Surveyed	1	1	2
Trident/Peacekeeper Support	No. Reports:	9	10	10
Trident/Peacekeeper Support	No. Areas Surveyed	-	2	2
Trident/Peacekeeper Support	No. Reports/Site Charts	-	2/2	2/2
<u>AIRCRAFT SUPPORT</u>				
H-2 Operations	Avg. No. Operating Aircraft	2	2	2
P-3 Operations	No. Flying Hours	976	1,270	1,251
P-3 Operations	Avg. No. Operating Aircraft	5	5	5
P-3 Operations	No. Flying Hours	3,473	3,274	3,206

IV. Personnel Summary.

	<u>FY 1987</u>	<u>FY 1988</u>	<u>FY 1989</u>
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End Strength (E/S)

A. <u>Military</u>	1,811	1,860	1,854
Officer	308	323	318
Enlisted	1,523	1,537	1,536
B. <u>Civilian</u>	1,026	1,036	1,033
USDH	1,021	1,031	1,028
FNDH	5	5	5

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Department of the Navy
Operation & Maintenance, Navy
Exhibit OP-5

Activity Group: Naval Observatory

Budget Activity: III - Intelligence and Communications

I. Description of Operations Financed.

This budget request covers operating costs for the Naval Observatory (NAVOBSY) which is located in Washington, D.C. The mission of the NAVOBSY is to make observations of and predict the positions of the sun, moon, planets and stars and to provide precise time, for use in navigation and positioning. Typical star and planet observing programs last between seven and ten years. The only two countries doing fundamental positional astronomy are the United States (NAVOBSY) and the Soviet Union.

This effort has many applications, both military and civilian. Some of the Department of Defense (DoD) applications are: calibration of satellite navigation systems, orbit calculations and predictions, precise guidance in space, precise positioning using time-synchronized systems, secure communications, sun and moon phenomena (rise and set, azimuths and altitudes) and earth rotation. Observations are taken at permanent sites in Washington, D.C., Richmond, Florida, Flagstaff, Arizona and the Black Birch Astronomical Observatory, New Zealand. The NAVOBSY also uses the Radio Astronomical facility at Green Bank, WV for the real-time determination of Universal Time and polar motion under a memorandum of understanding with the National Science Foundation.

The NAVOBSY sets the Time Standard for the DoD and the United States. As single manager of Time for DoD, the establishment, maintenance and improvement of a clock system of high stability, reliability, and precision is required. NAVOBSY developed the Precise Time and Time Interval (PTTI) Program to disseminate, distribute and transfer continuous time synchronization on a worldwide basis. This time synchronization is accomplished by portable clocks to reach the highest feasible accuracy and by many other systems such as satellites for users with less stringent requirements. The NAVOBSY maintains Precise Time Reference Stations around the world and monitors all radio navigation systems.

The NAVOBSY calculates and publishes the various astronomical and navigational almanacs as well as special data required by the Navy, Defense Department, other Government agencies and the general public. Strategic organizations of DoD are routinely supported. NAVOBSY is the sole source of certified astronomical and timing data for legal and civil use. The NAVOBSY is the only observatory in the U.S. providing fundamental astronomical data and serves as the central source of such data for the Government.

Activity Group: Naval Observatory (continued)

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout.

	FY 1988			FY 1989		
	FY 1987	Budget Request	Current Estimate	Initial Estimate	Amended Estimate	Change FY 88/89
Naval Observatory	8,465	9,898	9,436	9,406	9,907	501
Total	8,465	9,898	9,436	9,406	9,907	501

B. Reconciliation of Increases and Decreases.

1. FY 1988 Current Estimate						\$9,406
2. Pricing Adjustments						311
A. Annualization of FY 1988 Direct Pay Raise						
(1) Classified					(23)	22
(2) Wage Board					1	1
B. FY 1989 Direct Pay Raise					(71)	69
(1) Classified					69	1
(2) Wage Board					1	1
(3) Foreign National Direct					(-1)	(-1)
C. Stock Fund					-1	-1
(1) Non-Fuel					(-7)	(-7)
D. Industrial Fund Rates					(225)	52
E. Other Pricing Adjustments					52	173
(1) Health Benefits						
(2) Other						

Activity Group: Naval Observatory (continued)

B. Reconciliation of Increases and Decreases (continued)

504

3. Program Increases

(24)

A. One-Time FY 1989 Costs

24

- (1) Permanent Change of Station costs will occur because two employees will return from New Zealand and two employees will transfer to New Zealand.

(480)

B. Other Program Growth in FY 1989

48

- (1) The Master Clock is being upgraded in response to real-time operational requirements for improved PTTI from the Global Positioning System (GPS), other systems, and labs. Three new Hydrogen Masers installed in FY 1988 will require maintenance.

72

- (2) NAVOBSY is installing a complete PTTI monitoring system at the Consolidated Space Operations Command (CSOC) in Colorado Springs which will interconnect the many timed DOD systems at that location and provide a direct link to the NAVOBSY Master Clock. This is part of the DOD requirement for precise time and a responsibility assigned by DOD to NAVOBSY. Supplies, operational and maintenance costs will be required as the system becomes fully operational in early FY 1989.

Activity Group: Naval Observatory (continued)

B. Reconciliation of Increases and Decreases (continued)

93

- (3) Time transfer operations via communications satellites are necessary to calibrate outlying precise time reference stations and particularly to tie such facilities as the NAVOBSY Time Service Alternate Station in Florida and the Consolidated Space Operations Command (CSOC) in Colorado Springs into the Master Clock at the 1 nanosecond level. While Very Long Baseline Interferometry (VLBI) provides weekly calibration, satellite time transfer fills in on daily basis in between VLBI checks. The accuracy is needed to assure autonomous operation of these remote systems in case the Washington Master Clock is disrupted. The CSOC is the DOD control point of such systems as GPS, JTIDS, and various strategic systems. Since the satellite terminal in Florida will be fully operational in FY 1989, funds are required for supplies, operations and maintenance in Florida.

267

- (4) The Royal Greenwich Observatory will be closed and by FY 1989 Majesty's Nautical Almanac Office (HMNAO) will have ceased functioning. The Astronomical, Nautical and Air Almanacs have been jointly produced by HMNAO and NAVOBSY. U.S. Code requires the publication of these almanacs, and NAVOBSY will have to assume cost of composition and printing and five additional billets.

-314

4. Program Decreases

(-75)

A. One-Time FY 1988 Costs

-69

- (1) The satellite communication ground station in Washington, DC DC was upgraded to provide a continuous link between the Clock and the Alternate Clock in Florida.

-6

- (2) Permanent Change of Station costs associated with the return of return of one employee from New Zealand.

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Activity Group: Naval Observatory (continued)

B. Reconciliation of Increases and Decreases (continued)

B. Other Program Decreases in FY 1989	(-239)
(1) Two less compensable workdays.	-40
(2) Decrease in equipment purchases.	-199
5. FY 1989 Amended Estimate	\$9,907

III. Performance Criteria.

Accurate stellar positional data is published in Naval Observatory publications and provided to Navy and Department of Defense (DoD) programs (such as Polaris and Trident, Defense Mapping Agency (DMA), Global Positioning System (GPS) and Tracking Stations) on request.

Precise Time and Time Interval (PTTI) accomplishments include maintaining, operating and improving the U.S. Master Clock, controlling PTTI transmissions and disseminating time and phase corrections. Information is sent regularly by mail for 800 addressees and daily by teletype for rapid services for high priority information. Time ordered systems such as Loran "C", TRANSIT, GPS, and the Defense Satellite Communication system are kept on NAVOBSY time within very small tolerances. A computer-based data dissemination system has been developed which allows direct readout via telephone lines by DoD users of the NAVOBSY monitoring data. As a result, response to needs for calibration and control by platforms around the world is now immediate. The Naval Observatory maintains Precise Time Reference Stations around the world.

The major publications in support of safe navigation are:

- (1) The American Ephemeris and Nautical Almanac: basic reference for all work in astronomy, astronautics and geodesy.
- (2) The Nautical Almanac: used for celestial navigation on the Earth's surface.
- (3) The Air Almanac: used for celestial navigation by aircraft.

Activity Group: Naval Observatory (continued)

III. Performance Criteria (continued)

- (4) Publications of the U.S. Naval Observatory: contains tables of star position, planetary coordinates, double stars and other fundamental data.
- (5) Time Service Publications Series 1-17: daily, weekly, monthly and irregular; contains data on time, polar motion, all time-ordered systems including satellites, and advance predictions of Earth rotation.
- (6) Special Military Program: developed for Navy, Defense Mapping Agency, other DoD, NASA, and other U.S. and international use as required, including tables of sunrise, sunset, sun angles and azimuths.
- (7) Astronomical Phenomena, Bureau of Land Management Ephemeris, and other publications for U. S. Government agencies and the general public.

The Naval Observatory strives to respond in a timely manner to Navy and DoD requirements for astronomical data and precise time and for increased accuracy in these quantities.

IV. Personnel Summary

FY 1987 FY 1988 FY 1989

End Strength (E/S)

A. Military

Officer
Enlisted

5	10	11
5	8	8
-	2	3

B. Civilian

USDH
FNDH

118	122	127
117	120	125
1	2	2

Department of the Navy
Operation and Maintenance, Navy
Exhibit OP-5

Activity Group: Maintenance of Real Property
Budget Activity: III - Intelligence and Communications

I. Description of Operations Financed.

This program provides maintenance, repair and minor construction of all buildings, structures, grounds and utility systems required at Naval Oceanography Command facilities, Naval Security and Investigative Command activities, Naval Telecommunications Command facilities, the Naval Observatory and other ancillary activities to permit assigned forces and tenants to perform their mission.

The major elements of this program are:

- o Facilities Maintenance - finances scheduled, day-to-day recurring maintenance, and emergency service work needed to preserve facilities.
- o Major Repairs - provides major repairs necessary to bring existing facilities into adequate condition to support assigned missions.
- o Minor Construction - finances the erection, installation or assembly of real property facilities; the addition, extension alteration, conversion or replacement of existing real property facilities; the relocation of real property facilities; and the installation of equipment which becomes part of a facility.

Activity Group: Maintenance of Real Property (continued)

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout.

	FY 1988			FY 1989			Change FY 88/89	
	FY 1987	Budget		Current Estimate	Initial Estimate	Change		Amended Estimate
		Request	Approp					
Facilities Maintenance	20,996	23,406	21,524	17,550	22,560	-5,566	16,994	-556
Major Repair Projects	4,057	1,011	1,011	3,484	1,038	2,433	3,471	-13
Minor Construction	4,311	2,016	2,016	3,543	2,283	1,701	3,984	441
Total, MRP	29,364	26,433	24,551	24,577	25,881	-1,432	24,449	-128

B. Reconciliation of Increases and Decreases.

1. FY 1988 Current Estimate	\$24,577
2. Pricing Adjustments	797
A. Annualization of FY 1988 Direct Pay Raises	(72)
(1) Classified	2
(2) Wage Board	29
(3) Foreign National Direct	41
B. FY 1989 Direct Pay Raises	(117)
(1) Classified	11
(2) Wage Board	28
(3) Foreign National Direct	78
C. Stock Fund	(-57)
(1) Non-Fuel	-57
D. Industrial Fund Rates	(184)
E. FN Indirect Hire	(111)
F. Other Pricing Adjustments	(370)
(1) Health Benefits	17
(2) Other	353

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Activity Group: Maintenance of Real Property (continued)

B. Reconciliation of Increases and Decreases (continued)

3. Program Increases	1,096
A. One-Time FY 1989 Costs	(140)
(1) Satellite Processing Center Upgrade (SPCU) site preparation costs at Fleet Numerical Oceanography Center, Monterey, CA.	140
B. Other Program Growth in FY 1989	(956)
(1) Increased physical security minor construction funds for projects such as fencing, lighting and hardened magazines.	956
4. Program Decreases	-2,021
A. Other Program Decreases in FY 1989	(-2,021)
(1) Decreased level of effort in support of Facilities Maintenance and Repair Backlog.	-1,358
(2) Two less compensable days.	-46
(3) Reduction in the number of civilian end strength.	-617
5. FY 1989 Amended Estimate	\$24,449

Activity Group: Maintenance of Real Property (continued)

III. Performance Criteria.

Maintenance of Real Property
Backlog, Maint/Repair (\$000)
Total Buildings (KSF)

	<u>FY 1987</u>	<u>FY 1988</u>	<u>FY 1989</u>
	11,888	13,384	15,546
	12,663	12,708	12,708

IV. Personnel Summary

A. Military

Officer
Enlisted

	<u>64</u>	<u>66</u>	<u>65</u>
	1	1	1
	63	65	64

B. Civilian

USDH
FNDH
FNTH

	<u>311</u>	<u>314</u>	<u>281</u>
	150	153	120
	89	89	89
	72	72	72

Department of the Navy
Operation and Maintenance, Navy
Exhibit OP-5

Activity Group: Base Operations

Budget Activity: III - Intelligence and Communications

I. Description of Operations Financed.

This program group provides the base support services and material required for Naval Oceanography Command facilities, Naval Security and Investigative Command activities, Naval Telecommunications Command facilities, the Naval Observatory, and other ancillary activities to permit assigned forces and tenants to perform their mission.

The major elements of this program are:

- o Base Communications - Includes costs for administrative telephones, telecommunications centers, industrial security networks, and paging networks.
- o Utility Operations - Includes operating expenses for purchased electricity, electricity generating plants, purchased steam and hot water, heat plants, utility distribution systems, waste systems, air conditioning and refrigeration plants.
- o Personnel Operations - Support required for personnel related functions including expenses for:
 - Bachelor Housing Operations and Furnishings - provides support for the operation of barracks and the purchase and maintenance of personnel support equipment related to this housing.
 - Other Personnel Support - provides for mess halls, sales activities, laundry and dry cleaning facilities.
 - Morale Welfare and Recreation - provides authorized appropriated fund support for shore based recreation activities.
 - Station Hospitals, Medical and Dental Clinics - direct and indirect health care costs for Health Care Facilities not under the financial control of the Navy Medical Command.
 - Human Goals - provides support for programs which focus on improving organizational and individual effectiveness and the administrative support of the Alcohol and Drug programs.

Activity Group: Base Operations (continued)

I. Description of Operations Financed (continued)

- o Base Operations - Mission - Support for those Base Operations functions which are required in direct support of the mission of the base. For example, Fleet Training Support, Logistics Support, etc. Expenses are included for the following functions:
 - Retail Supply Operations - In addition to standard supply functions, this item includes the procurement, receipt, storage and issue of bulk liquid fuel, including operating aircraft fuel servicing facilities. Additionally, waterfront operations such as handling incoming and outgoing cargo and loading/unloading live ammunition onto and from combatant vessels are included.
 - Maintenance of Installation Equipment - provides for maintenance of major shore based equipment including: service and miscellaneous craft, construction equipment (non-deployable), weapons, electronics, electronic engineering, and fleet moorings.
 - Other Base Services - provides for the maintenance and operation of vehicles/other transportation equipment, port services (includes navigational assistance ships, operation of service craft, degaussing operations, and oil spillage cleanup).
 - Base Operations - Ownership - Support required at shore bases regardless of type of mission being performed which must be sustained to have a functioning base. Expenses are included for the following functions:
 - Other Engineering Support - Public Works Department Administration, engineering services, custodial services, refuse/garbage collection and disposal, snow removal, rental and leasing of real property, and fire protection and firefighting for Naval activities and their tenants.
 - Administration - provides support related to financial/resource management, civilian manpower management, and maintaining military personnel records.
 - Automated Data Processing - provides analysis, programming, equipment rental, operations and maintenance, contractual services and supplies.
 - Hazardous Waste Material Handling - includes personnel, supplies and training associated with the identification and disposal of hazardous wastes.
 - Audiovisual - provides supplies and services required for audiovisual support.

Activity Group: Base Operations (continued)

I. Description of Operations Financed (continued)

- Physical Security - provides shore base physical security.

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout.

	FY 1988			FY 1989			Change FY 88/89
	FY 1987	Budget Request	Approp	Current Estimate	Initial Estimate	Amended Estimate	
Base Communications	9,440	7,197	6,515	6,711	6,913	6,426	-285
Utility Operations	39,500	40,307	37,447	37,986	40,295	37,634	-352
Personnel Operations	5,760	5,880	5,297	5,197	5,652	5,068	-129
Base Ops, Mission	13,415	13,812	13,059	12,103	13,940	12,190	87
Ownership Operations	34,945	33,638	30,387	30,680	32,571	30,513	-167

Total, Base Operations	103,060	100,834	92,705	92,677	99,371	91,831	-846
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B. Reconciliation of Increases and Decreases.

1. FY 1988 Current Estimate	\$92,677
2. Pricing Adjustments	2,864
A. Annualization of FY 1988 Direct Pay Raises	(259)
(1) Classified	91
(2) Wage Board	28
(3) Foreign National Direct	140

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Activity Group: Base Operations (continued)

B. Reconciliation of Increases and Decreases (continued)

B.	FY 1989 Direct Pay Raise	(586)
	(1) Classified	342
	(2) Wage Board	25
	(3) Foreign National Direct	219
C.	Stock Fund	(-174)
	(1) Non-Fuel	-174
D.	Industrial Fund Rates	(480)
E.	FN Indirect	(218)
F.	Other Pricing Adjustments	(1,495)
	(1) Health Benefits	144
	(2) Other	1,351
		-63
3.	Functional Program Transfers	
	A. Transfers In	(139)
	(1) Intra-Appropriation	139
	(a) Consolidation of Guam recreation from BA-2.	(139)
	B. Transfers Out	(-202)
	(1) Intra-Appropriation	-202
	(a) Health Care function at NAVCOMMSTA UK to BA-8.	(-38)
	(b) GSA building leases to Federal Building Fund in BA-9.	(-164)
		758
4.	Program Increases	
	A. Annualization of FY 1988 Increases	(340)
	(1) Increase provides full year funding of support operations for the Naval Security and Investigative Command at new site in Building 111, Washington Navy Yard.	340

Activity Group: Base Operations (continued)

B. Reconciliation of Increases and Decreases (continued)

B. Other Program Growth in FY 1989	(418)	
(1) Increased base services and utility costs for new computer facility at Fleet Numerical Oceanographic Center, Monterey, CA.	358	
(2) Additional base services costs required for spare parts, maintenance of office word processing systems, copiers, desk top computers, associated consumables, etc.	60	
		-4,405
5. Program Decreases		
A. Annualization of FY 1988 Decreases	(-100,	
(1) Installation of communication lines/equipment for NAVWESTOCEANCEN Pearl Harbor, HI.	-100	
B. One-Time FY 1988 Costs	(-62)	
(1) Installation of communication lines/equipment associated with the relocation of the Naval Security and Investigative Command to new site at Building 111, Washington Navy Yard.	-62	
C. Other Program Decreases in FY 1989	(-4,243)	
(1) Reduction in energy use due to energy conservation efforts.	-1,559	
(2) Two less compensable workdays.	-185	
(3) Reduction in Base Operations Support.	-1,303	

Activity Group: Base Operations (continued)

B. Reconciliation of Increases and Decreases (continued)

(4) Reduction to the number of instruments and lines for base administration telephone support.	-347	
(5) Reduction in the number of civilian end strength.	-849	
6. FY 1989 Amended Estimate		\$91,831

III. Performance Criteria.

<u>Operations of Utilities</u>			
Total Energy Consumed (MBTJ's)	5,457,812	5,403,234	5,349,202
Total Non-Energy Consumed (000 Gals)	902,143	902,215	902,757
<u>Base Communications</u>			
Number of Instruments	15,866	15,866	15,866
Number of Mainlines	8,200	8,009	8,009
Daily Average Message Traffic	555,501	555,495	555,501
<u>Personnel Operations</u>			
Bachelor Housing (\$000)	627	393	379
No. of Officer Quarters	84	84	84
No. of Enlisted Quarters	1,315	1,315	1,315
Other Personnel Support (\$000)			
Population Served, Total	3,608	3,570	3,312
(Military, E/S)	10,811	10,811	10,811
(Civilian, E/S)	7,783	7,783	7,783
	3,028	3,028	3,028
Morale, Welfare & Rec (\$000)			
Population Served (Total)	1,525	1,234	1,377
(Military, E/S)	10,811	19,960	19,960
(Civ/Dep, E/S)	7,783	7,696	7,696
	12,264	12,264	12,264

Activity Group: Base Operations (continued)

III. Performance Criteria (continued)

<u>Base Operations--Mission</u>			
Retail Supply Oper (\$000)	4,576	4,413	4,506
Line Items Carried (000)	148	148	148
Receipts (000)	213	213	213
Issues (000)	226	226	226
Maint of Instal Equip (\$000)	531	572	586
Other Base Services (\$000)	8,308	7,118	7,098
No. of Motor Vehicles, Total	1,796	1,796	1,796
(Owned)	1,092	1,092	1,092
(Leased)	704	704	704
<u>Ownership Operations</u>			
Other Engineering Sup (\$000)	13,963	13,538	13,690
Administration (\$000)	17,960	14,519	13,922
Number of Bases, Total	85	85	85
(CONUS)	49	49	49
(O/S)	36	36	36
Physical Security (\$000)	3,022	2,623	2,901

IV. Personnel Summary.

	<u>FY 1987</u>	<u>FY 1988</u>	<u>FY 1989</u>
A. <u>Military</u>	<u>1,160</u>	<u>1,249</u>	<u>1,210</u>
Officer	160	150	150
Enlisted	1,000	1,089	1,060
B. <u>Civilian</u>	<u>1,241</u>	<u>1,257</u>	<u>1,212</u>
USDH	737	736	712
FNDH	313	325	313
FNIH	191	196	188

SUMMARY OF REQUIREMENTS BY ACTIVITY GROUP

	FY 1987			FY 1988			FY 1989		
	<u>Personnel</u>	<u>E/S</u>	<u>O&MN</u>	<u>Personnel</u>	<u>E/S</u>	<u>O&MN</u>	<u>Personnel</u>	<u>E/S</u>	<u>O&MN</u>
	<u>Mil</u>	<u>Civ</u>	<u>Funding</u>	<u>Mil</u>	<u>Civ</u>	<u>Funding</u>	<u>Mil</u>	<u>Civ</u>	<u>Funding</u>
<u>Budget Activity 4: Airlift & Sealift</u>									
	47	0	597,308	153	426	547,117	153	401	546,629
Total BA-4									

Department of the Navy
Operation and Maintenance, Navy
Exhibit OP-05

Budget Activity: IV Airlift and Sealift (SUMMARY)

I. Description of Operations Financed.

The Sealift Prepositioning and Surge program provides the worldwide sealift capability to deploy combat forces and supporting material and cargo that may be required to meet national contingency objectives. The program is defined in two major categories, Sealift Prepositioning and Sealift Surge. Sealift Prepositioning includes the forward deployed Prepositioning Ships (PREPO), which carry selected equipment, munitions and supplies for all U.S. Armed Services, and 13 Maritime Prepositioning Ships (MPS), divided into 3 operating squadrons, each of which carries equipment, POL, and all other cargo required to support a Marine Amphibious Brigade (MAB) for 30 days of combat operations.

The Sealift Surge program includes several efforts which collectively provide the sealift capability to onload, transport and discharge troops, equipment, POL, and cargo from the U.S. to worldwide combat operations locations. Movement of the pre-designated Army divisions will be accomplished by Fast Sealift Ships (FSS/TAKR). Two hospital ships (TAH), delivered during FY 1987, provide the ability to conduct casualty medical treatment in areas immediately adjacent to combat operations.

The Military Sealift Command (MSC), an integral part of the sealift program, moved from industrial funding to direct funding in FY 1988.

In FY 1989 funding responsibility for maintaining the Ready Reserve Fleet (RRF) will be transferred to the Maritime Administration (MARAD) in the Department of Transportation. This responsibility will include acquiring additional ships, as well as all ancillary costs associated with the management of the Ready Reserve Fleet. Funds needed to accomplish these functions will be appropriated to the Maritime Administration. Available audit savings have been incorporated into the following budget estimates.

Budget Activity: IV (continued)

II. Financial Summary (Dollars in Thousands).

A. Activity Group Breakout:

	FY 1987		FY 1988		FY 1989		Change FY 88/89
	FY 1987	Budget Request	Approp	Current Estimate	Initial Estimate	Amended Estimate	
<u>TOTAL-Activity Group</u>	597,308	549,099	547,117	547,117	578,782	-32,153	-488

B. Schedule of Increases and Decreases.

	Amount
1. FY 1988 President's Budget Request	\$549,099
2. Congressional Adjustments	-1,982
A. Inflation Adjustment	-711
B. Travel and Transportation Adjustment	-334
C. Savings Adjustment	-869
D. Contractor Support Services Adjustment	-68
3. FY 1988 Appropriated	547,117
4. Pricing Adjustments	15,216
A. FY 1988 Pay Raise	(427)
1) Classified	342
2) Annualization of Clerical Pay Raise	85
B. Industrial Fund Rates	14,614
C. Other	(175)
1) Health Benefits	175
5. Program Decreases	-15,216
A. Program Decreases	(-15,216)

Budget Activity: IV (continued)

1) Reduction in RRF maintenance	-11,968	
2) Goldwater-Nichols Act reduction	-3,248	
6. FY 1988 Current Estimate		\$547,117
7. Pricing Adjustments		100,502
A. Annualization of FY 1988 Pay Raise	(110)	
1) Classified	110	
B. FY 1989 Direct Pay Raise	(274)	
1) Classified	273	
2) Wage Board	1	
C. Stock Fund	(-18)	
1) Non-Fuel	-18	
D. Industrial Fund Rates	95,037	
E. Other Pricing Adjustments	5,099	
8. Functional Program Transfers		-70,960
A. Transfers Out	(-70,960)	
1) Ready Reserve Fleet transfer to MARAD	-70,960	
9. Program Increases		16,895
A. Airlift and Sealift	16,895	
10. Program Decreases		-46,925
A. Airlift and Sealift	-46,925	
11. FY 1989 Amended Budget Request		546,629

Department of the Navy
Operation and Maintenance, Navy
Exhibit OP-05

Activity Group: Sealift Prepositioning and Surge
Budget Activity: IV Airlift and Sealift

I. Description of Operations Financed.

The Sealift Prepositioning and Surge program provides the worldwide sealift capability to deploy combat forces and supporting material and cargo that may be required to meet national contingency objectives. The program is defined in two major categories, Sealift Prepositioning and Sealift Surge. Sealift Prepositioning includes the forward deployed Prepositioning Ships (PREPO), which carry selected equipment, munitions and supplies for all U.S. Armed Services, and 13 Maritime Prepositioning Ships (MPS), divided into 3 operating squadrons, each of which carries equipment, POL, and all other cargo required to support a Marine Amphibious Brigade (MAB) for 30 days of combat operations.

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Activity Group: Sealift Prepositioning/Surge (cont'd)

II. Financial Summary (Dollars in Thousands).

A. Sub-Activity Group Breakout:					
	FY 1987		FY 1988		FY 1989
	FY 1987	Budget Request	Approp	Current Estimate	Initial Estimate
Prepositioning Forces	452,680	367,182	367,155	373,336	393,710
Sealift Surge	144,628	131,971	125,096	125,898	133,256
MSC Headquarters	0	49,946	49,571	47,883	51,816
TOTAL-Activity Group	597,308	549,099	547,117	547,117	578,782
					-32,153
					546,629
					-488
B. Reconciliation of Increases and Decreases.					
					<u>Amount</u>
1. FY 1988 Current Estimate					547,117
2. Pricing Adjustments					100,502
A. Annualization of FY 1988 Direct Pay Raise				(110)	
1) Classified				110	
B. FY 1989 Direct Pay Raise				(274)	
1) Classified				273	
2) Wage Board				1	
C. Stock Fund				(-18)	
1) Non-Fuel				-18	
D. Industrial Fund Rates				95,037	
E. Other Pricing Adjustments				5,099	
3. Functional Program Transfers					-70,960
A. Inter-Appropriation				(-70,960)	
1) Transfer of the Ready Reserve Fleet to				-70,960	

Activity Group: Sealift Prepositioning/Surge (cont'd)

to the Department of Transportation under the cognizance of the Maritime Administration.

16,895

4. Program Increases

A. Annualization of FY 1988 Increases (336)

336

- 1) Increase reflects annualization of ADP efforts associated with the quality assurance at MSC Headquarters which includes the testing and certifying of projects to determine if they meet contract specifications.

B. One-Time FY 1989 Costs (2,452)

1,352

- 1) Increase in Per Diem days for the Fast Sealift Ships (FSS).

1,100

- 2) Increase is required for additional design, development and experimental expenses associated with the MSC RDT&E ship programs, which include operations and engineering technical support.

C. Other Program Growth (14,107)

793

- 1) Increase provides for analysis of MSC contractual arrangements to allow the government to make the most cost effective decisions concerning the timing of lease payments based upon current interest rates.
- 2) Increase in the maintenance required on the Sealift Support equipment and the prepositioning of the equipment to reduce the maintenance backlog. 3,414
- 3) Recurring and cyclic biennial maintenance of the 9,900

Activity Group: Sealift Prepositioning/Surge (cont'd)

Naval Support Element equipment on board the MPS and the PREPO ships.

-46,925

5. Program Decreases

A. Annualization of FY 1988 Decreases (-924)

- 1) Annualization of the Non-Departmental Management Headquarters Reduction mandated by the Goldwater-Nichols DOD Reorganization Act for the MSC Headquarters. -924

B. One-Time FY 1988 Costs (-13,448)

- 1) Decrease reflects the one-time purchase of furniture for the MSC consolidation move to the Washington Navy Yard. -612
- 2) Completed Ready Reserve Fleet maintenance costs on previously deferred work and outported ships. -8,978
- 3) Cost of activating one additional ship in FY 1988 for a JCS sponsored exercise. -1,541
- 4) Cost for RRF Outporting/Dispersal program -1,819
- 5) Cost for RRF spare parts management -339
- 6) Reduction of one per diem day for 4 ships -159

C. Other Program Decreases (-32,553)

- 1) Reduction in computer modeling, review and analysis of all financial aspects of the capital hire recalculation for the MPS and MSC. -168

Activity Group: Sealift Prepositioning/Surge (cont'd)

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|--|---------|
| 2) Reduction in Contractor Support Services | -30 |
| 3) Reduction in personnel compensation due to 2 less paid days in FY 1989. | -168 |
| 4) Reduction in RRF upgrades from the NDRF. Completing the RRF Upgrade Program. | -2,476 |
| 5) Discontinuation of the following programs: SEASTRAT; TAH Medical Operations (Hospital Ships Medical Treatment Facilities); and MSC Crisis Management. | -6,284 |
| 6) Reassignment of the 2 vessels to the RRF. | -19,611 |
| 7) Reduction in cost for Sealift Enhancement equipment and associated architectural support. | -1,710 |
| 8) Reduction in hospital ship (TAH) operating status; ships placed in ROS-30 vice ROS-5 status. | -2,106 |

6. FY 1989 Amended Estimate

546,629

III. Performance Criteria.

1. <u>Mobility Enhancement</u> <u>(# of ships/\$000)</u>	<u>FY 1987</u>	<u>FY 1988</u>	<u>FY 1989</u>
A. Prepositioning Forces (PREFO)	12/123,790	12/92,561	11/116,434
B. Maritime Prepositioning Ships (MPS)	13,328,763	13/252,174	13/311,423

Activity Group: Sealift Prepositioning/Surge (cont'd)

2. Sealift Surge

A. Inventory/(\$000)

1. Ready Reserve Fleet (RRF)	86/77,216	99/79,983	0/0
2. Fast Sealift Ships (FSS/TAKR)	8/23,897	8/19,524	8/32,062
3. TAVB	2/2,390	2/2,031	0/0
4. Hospital Ships	2/10,039	2/5,856	2/5,851

B. RRF Activations

	7	1	0
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IV. Personnel Summary-

End Strength

A. Military

Officer
Enlisted

B. Civilian

USDH

	<u>FY 1987</u>	<u>FY 1988</u>	<u>FY 1989</u>
	47	153	153
	7	48	48
	40	105	105
	0	426	401
	0	426	401